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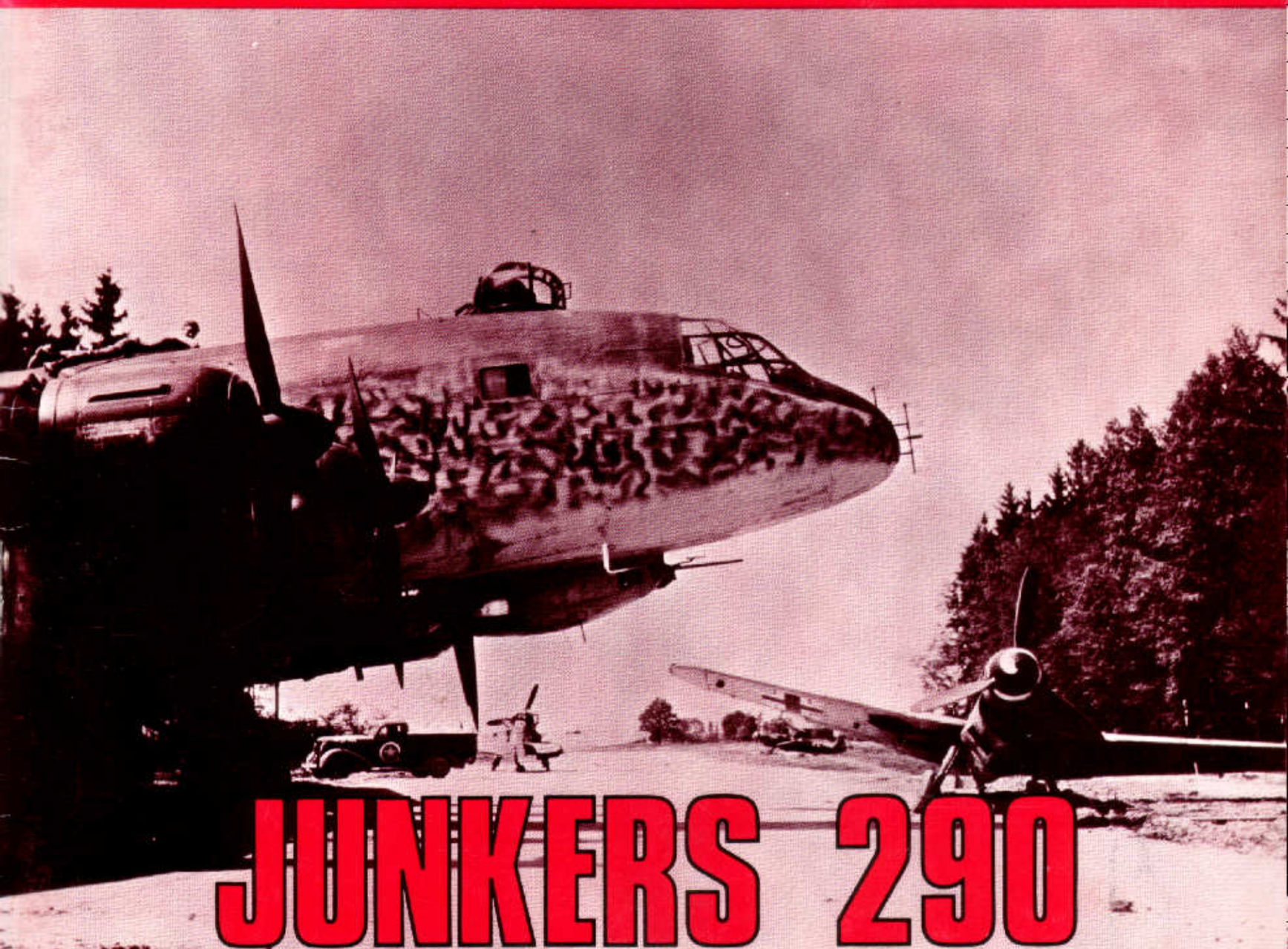
Close-Up 3



JUNKERS 290

Ju 290 A-3 found abandoned at Salzburg, May 1945.

Easily one of the most historically neglected aircraft operated during WW II was the big German Junkers 290 "Seeadler" (Sea Eagle). Flown operationally by the Luftwaffe over immense areas of Europe, the Mediterranean and North African theaters, the "two-ninety" performed its mission well. A well-designed airplane, easy to fly and service, it was particularly popular with its crews. Although, if numbers produced represent a measure of its acceptance, it must be viewed as a modest investment by historians since fewer than 100 were completed. Nevertheless, its diversity and adaptability are undeniable, hallmarks of a true thoroughbred. Nor did the planning stop with the basic four-engined design as the giant Ju 390 testifies, but that is a story unto itself.

Acknowledgements of assistance and gratitude in the preparation of our story must be made. Details surrounding "Alles Kaputt" were unselfishly made available by General Harold E. Watson, U.S.A.F. (ret) whose experience with German aircraft surely must be unique. J. Richard Smith provided material related to the operational usage of the 290 from his vast archives while Jaroslav Zazvonil graciously assisted in the documentation of Czechoslovakian experience with the ill-fated L 290. Additionally, documents held by the National Air & Space Museum provided much statistical data in addition to other facets of research. Photographic assistance was an absolute must in planning of a thorough pictorial presentation. Our deep appreciation goes to the following contributors: Señor Javier Taibo Arias, Herr Fleischmann, Herr Dr. Haupt, Herr Günther Heise, Herr Hans Obert, Herr Harold Thiele, Mr. Douglas W. Thoma and Mr. David Vincent.

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JUNKERS 290 SERIAL NUMBERS AND FACTORY REGISTRATION CODES

W. Nr.	TYPE	CODE	W. Nr.	TYPE	CODE	W. Nr.	TYPE	CODE	W. Nr.	TYPE	CODE	W. Nr.	TYPE
0007	V1	BD+TX	0163	A-3		0179	A-5	KR+LJ	0195	A-7	KR+LZ	0211	A-8
0004	V2	DJ+YE	0164	A-3		0180	A-5	KR+LK	0196	A-7	PJ+PS	0212	A-8
0003	V3	GF+GH	0165	A-4		0181	A-7	KR+LL	0197	A-7		0213	A-8
0150	A-0		0166	A-4		0182	A-9	KR+LM	0198	A-7		0214	A-8
0151	A-0		0167	A-4		0183	A-9	KR+LN	0199	A-7		0215	A-8
0152	A-1	SB+QB	0168	A-4		0184	A-9	KR+LO	0200	A-7		0216	A-8
0153	A-1	SB+QC	0169	A-4	PI+PW	0185	A-6	KR+LP	0201	A-7		0217	A-8
0154	A-1	SB+QD	0170	A-5	KR+LA	0186	A-7	KR+LQ	0202	A-7		0218	A-8
0155	A-1	SB+QE	0171	A-5	KR+LB	0187	A-7	KR+LR	0203	A-7		0219	A-8
0156	A-1	SB+QF	0172	A-5	KR+LC	0188	A-7	KR+LS	0204	A-7		0220	A-8
0157	A-2	SB+QG	0173	A-5	KR+LD	0189	A-7	KR+LT	0205	A-7		0221	A-8
0158	A-2	SB+QH	0174	A-5	KR+LE	0190	A-7	KR+LU	0206	A-7			
0159	A-2	SB+QI	0175	A-5	KR+LF	0191	A-7	KR+LV	0207	A-7			
0160	A-3	SB+QJ	0176	A-5	KR+LG	0192	A-7	KR+LW	0208	A-7			
0161	A-3	SB+QK	0177	A-5	KR+LH	0193	A-7	KR+LX	0209	A-7			
0162	A-3		0178	A-5	KR+LI	0194	A-7	KR+LY	0210	A-7			

JUNKERS 290

By Thomas H. Hitchcock

In autumn 1945 a visitor to the collection of Axis aircraft displayed at Freeman Field, Seymour, Indiana would have been impressed with one particular German aircraft. Emblazoned in red script on the forward fuselage was an epitaph to the Third Reich: "Alles Kaputt." Largest of all Axis types placed on exhibit, this particular Ju 290 has earned its niche in aviation history.

With the signing of documents in the Rheims schoolhouse on May 6, 1945, all action by the German Forces in the West ceased. However, in Southern Czechoslovakia the cessation of hostilities was yet to take effect. German control of occupied areas within Czechoslovakia was deteriorating rapidly. Although General Patton's Third Army had surged into Czechoslovakia, it was obliged to return to a line prearranged at Potsdam, thereby leaving all Czechoslovakia to Soviet occupation. In view of this frightening reality, local Luftwaffe personnel and dependents were assembled hurriedly at various Eastern points for their migration back to Germany.

One group of eighty men, women and children complete with housewares, bedding, personal effects and even baby carriages was resolved to chance flying out of its entrapment. Loaded aboard one of the few large serviceable Luftwaffe aircraft left intact, a Junkers Ju 290 A-7; PJ+PS; W. Nr. 0196[1], they were airborne during the early hours of May 6, 1945.

Piloted by thirty-year-old Kommandant and Flugzeugführer (command pilot) Hauptmann Heinz Braun, the crew consisted of Oberleutent Günther Hassold, Beobachter (observer); Oberfeldwebel (M/Sgt.) Freidrich Aufdenkamp, Flugzeugführer (2nd pilot); Oberfeldwebel Gerhard Throne, Bordfunker (radio operator); Oberfeldwebel Kurt Burow, Bordtechaniker (a/c mechanic); Unteroffizier (S/Sgt.) Günther Krippner, Bordschuz and Flugzeugelektriker (gunner-electrician) and Unteroffizier Otto Schmidt, Bordtechaniker (a/c mechanic).

Flying low in turbulent weather to elude Soviet fighters, the large aircraft flew westward unmolested. Although by May 1945 fuel was in short supply for any and all Luftwaffe aircraft, the Junkers crew had been successful in clandestinely hoarding enough to complete a journey back to that part of Germany not under Soviet threat. After a successful takeoff and flight, the plane landed in U.S. occupied Munich where its grateful passengers disembarked.

[1]The precise werk nummer is in doubt since handwritten U.S. documents as early as May 10, 1945, refer to aircraft serial number 726. However, it is likely that the "726" was actually misread from the German handwritten 196.

"Alles Kaputt" taxies with Col. Watson at the controls.

The aircraft quickly was selected for shipment to Wright Field by U.S.A.A.F. officers under category "One," priority Three. A few hours later the Junkers was airborne again piloted by Col. Harold E. Watson with Capt. Fred B. McIntosh as co-pilot, the plane flew directly to Headquarters Air Technical Intelligence Foward Collection Point based at Nürenburg/Roth. It will be remembered that a team headed by Col. Watson had gained legendary fame by collecting nearly forty prize Luftwaffe aircraft for shipment to the U.S. in less than three weeks. Because of its size and excellent flying condition, the Ju 290 was well suited for a transatlantic flight to the U.S.A.

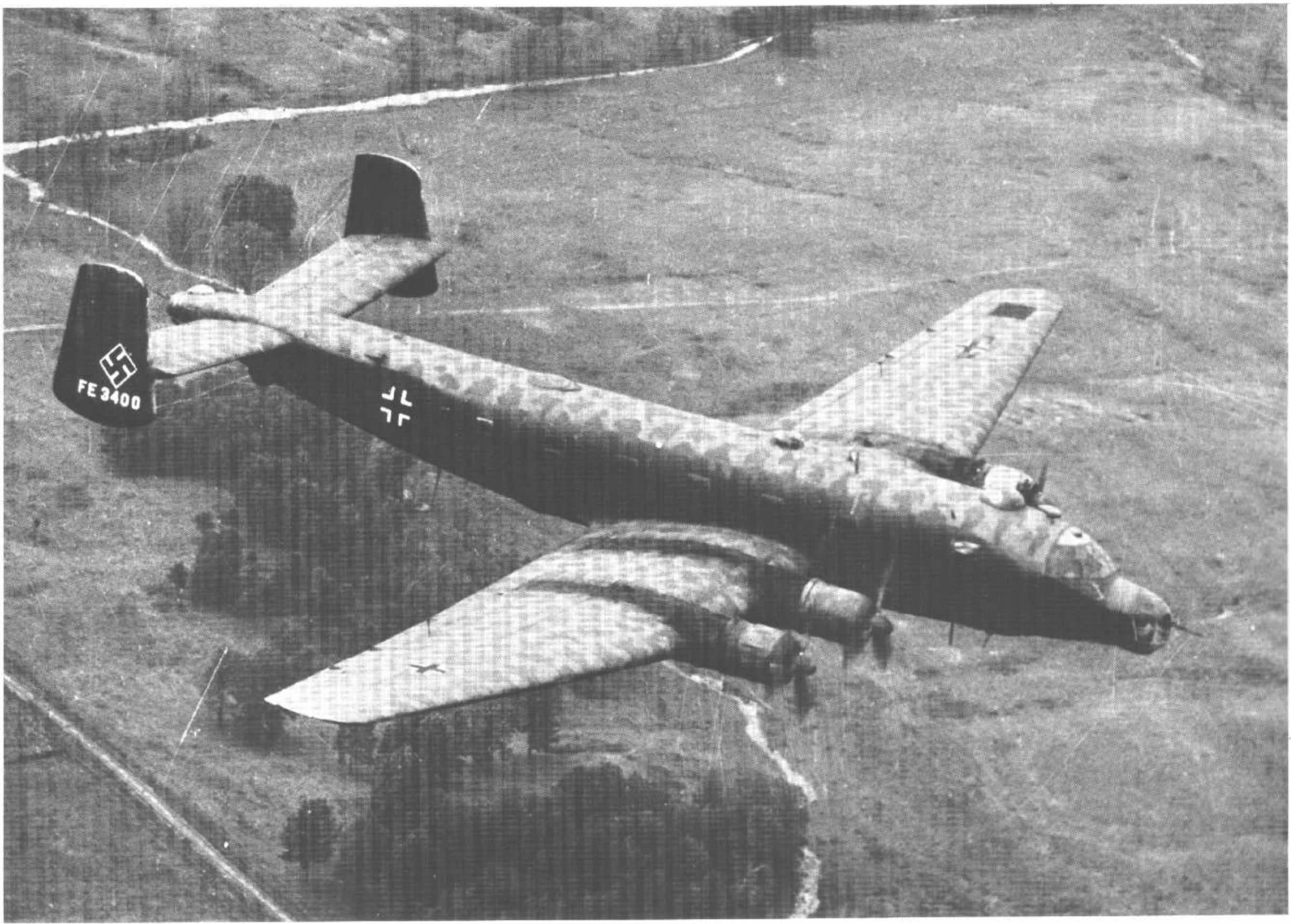
While the German crew officially was interred, they were persuaded to assist the Americans in the transatlantic undertaking. In the following four weeks, the German and American crews worked round the clock in preparation for the final phase of "Operation Lusty." The Junkers was given a thorough structural, electrical, instrument and mechanical inspection by a team of competent American and German mechanics. The German oil was drained and replaced with a corresponding grade of U.S. oil. All four engines were thoroughly inspected, but because two had 1000 hours flying time, they were removed and replaced with two newer units, one of which was found at the bottom of a Paris swimming pool.

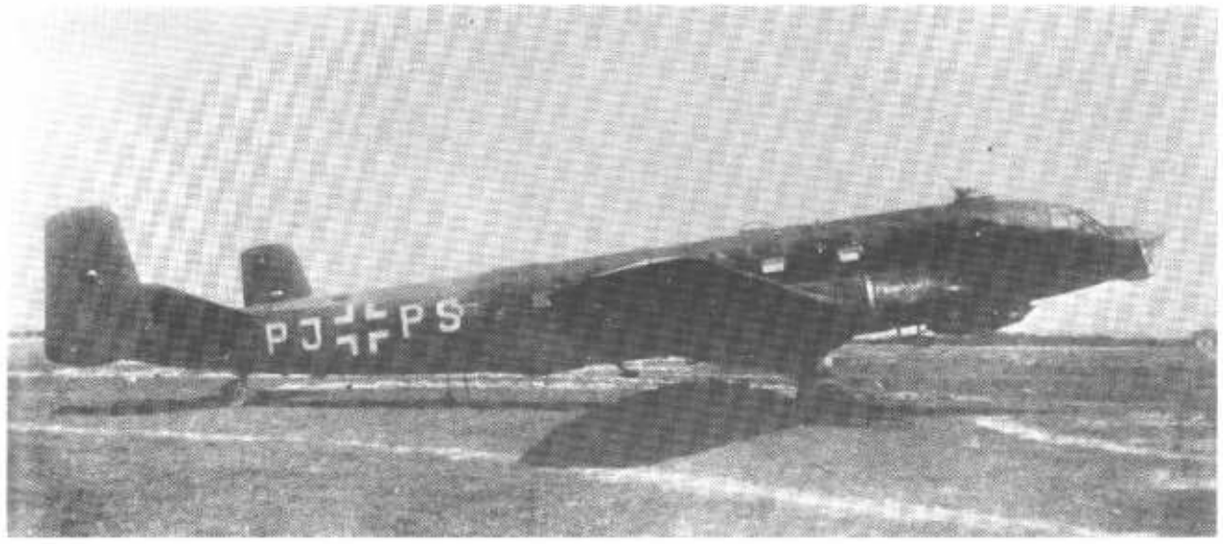
Test flights revealed that at an altitude of 10,000 ft[2] the Junkers had a range of between 16 and 18 hours at 185 mph or roughly 3000 miles. This range could be increased by 2 hours providing one engine was feathered after one-third of the original fuel had been consumed. However, although this procedure was used by the Luftwaffe, it was not employed on the Atlantic crossing. During the first two weeks of July 1945, ATC minimum radio equipment and radar were installed at Le Culot, Belgium, for the transoceanic flight.

Not long thereafter the Junkers took off from Orly Field with Col. Watson as pilot, Capt. McIntosh copilot, a Navigator, Engineering Officer Capt. Maxfield, Aerial Engineer T/Sgt. Brock, Crew Chief Sgt. Stover, a Radio Operator Instrument Specialist T/Sgt. Friske, Electrical Specialist T/Sgt. Holm and Mechanics T/Sgt. Dressler and S/Sgt. Namowicz. Stopping briefly in the Azores then flying the Atlantic to Bermuda and on to Wright Field, the big Junkers broke the best C-54 time by more than an hour.

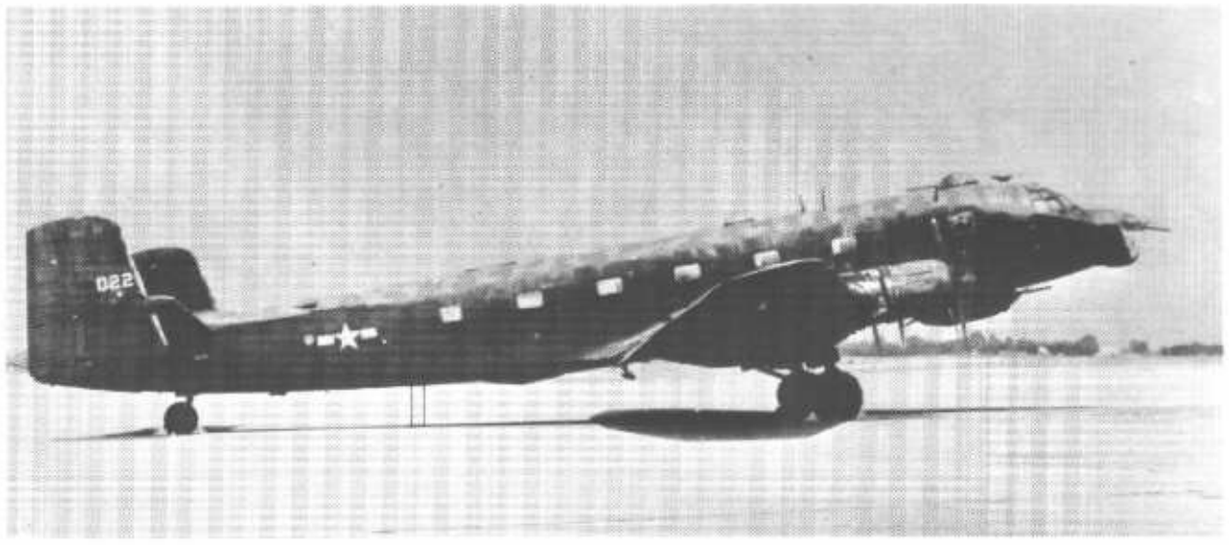
Later at Wright Field it was assigned Foreign Equipment number FE-3400. Test flights were carried out into the autumn of 1945 and later the airframe was cut into test sections once all flight testing had been concluded. It was only then that the crew of "Alles Kaputt" discovered an item that surely must have given them pause. Hidden in the right wing was an unexploded dynamite charge, a measure of Czech resistance that would surely have doomed the German crew had it not been for a defective activating pin.

[2]The oxygen system was not rebuilt to U.S. standards, thus the 10,000 ft limit to altitude.

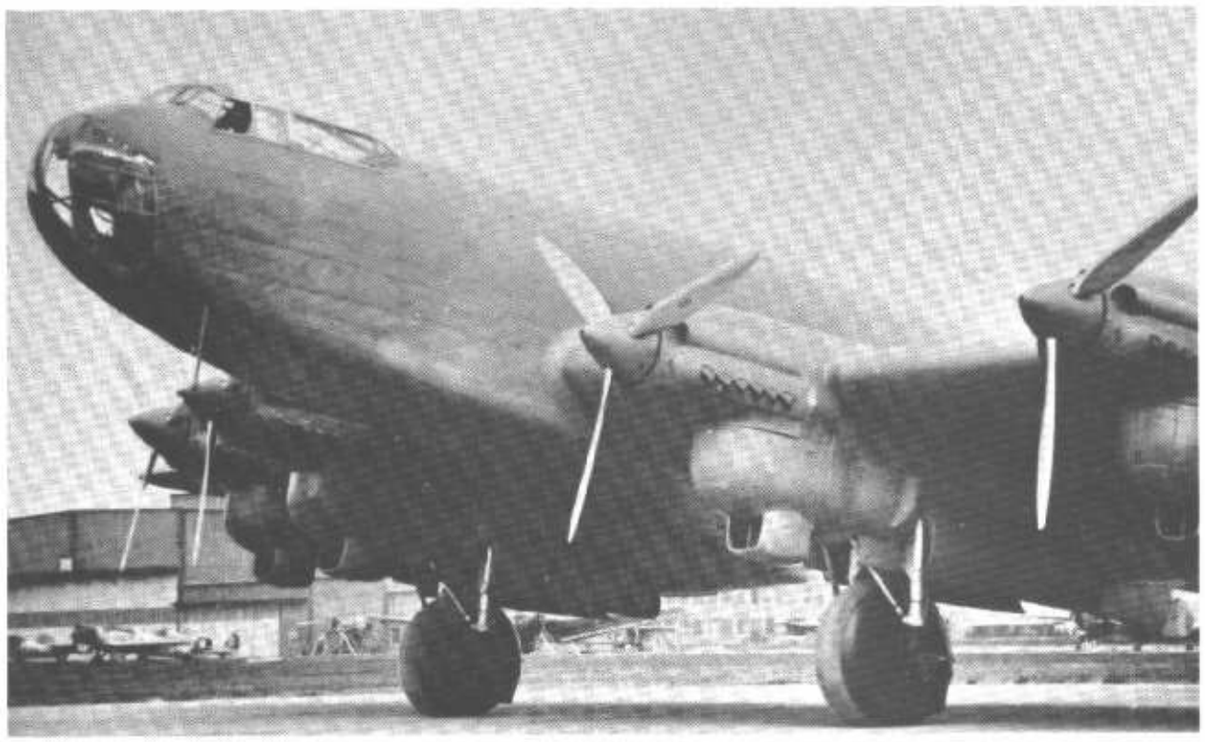


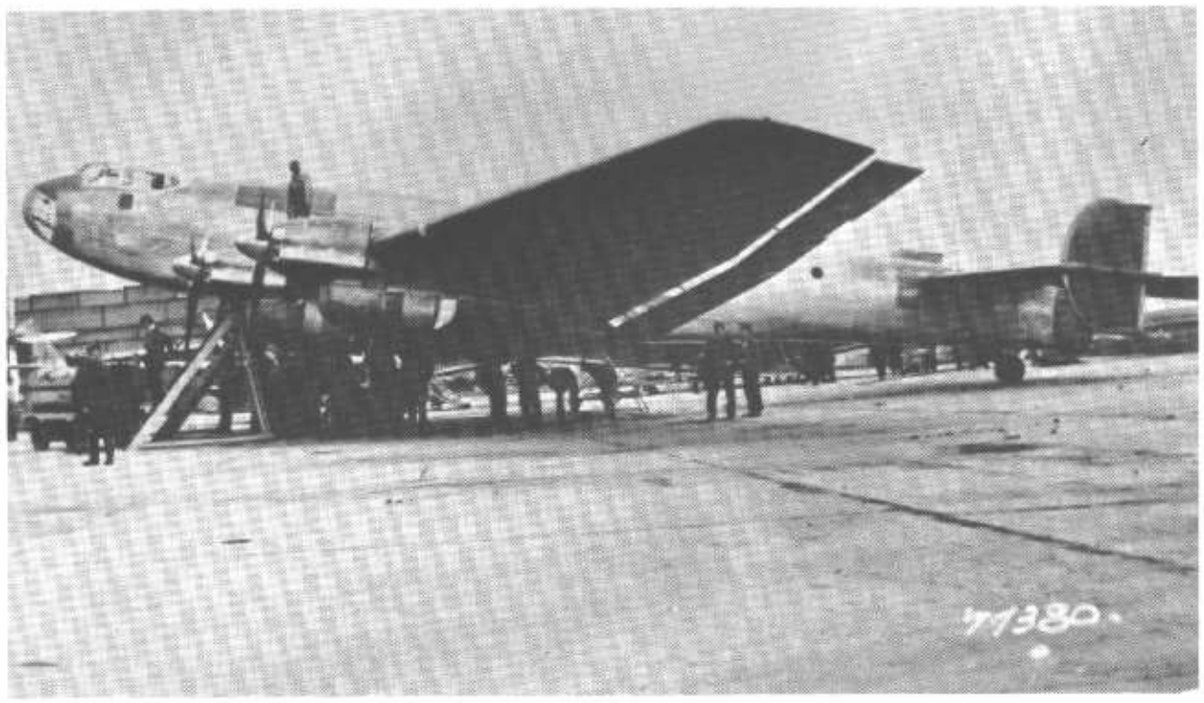


Above: "Alles Kaputt" in its original German markings.
Top right: Upon arrival in the U.S. the German PJ+PS code was scrubbed off and the American serial number USA-022 added.



Below: With a new coat of black paint and reinstatement of German insignia, "Alles Kaputt" became Foreign Equipment number FE-3400.
Bottom: As a smaller B-17 taxies in the background, the crew of "Alles Kaputt" secures its prize.





Top row: The Ju 89 V1 (left), and Ju 90 V1 (right). Bottom row: Views of the Ju 89 V2 (left), and Ju 90 V1 (right), reveal similarities.

Certainly one of the most successful multiengined aircraft evolved by the German aviation industry during the Third Reich was the Junkers 290. It was, however, produced in relatively small numbers with less than sixty being completed. Versatility was its attribute. At one time or another, it served as troop transport, supply freighter, long-range maritime reconnaissance, special operations transport, missile carrier and bomber. Yet in spite of this, the Ju 290 evolved more or less as the result of progressive modifications rather than as an uncompromised new concept. Initially the Junkers 290 was an enlarged version of the Ju 90 transport, which was itself an outgrowth of the new Luftwaffe's Ju 89 bomber.

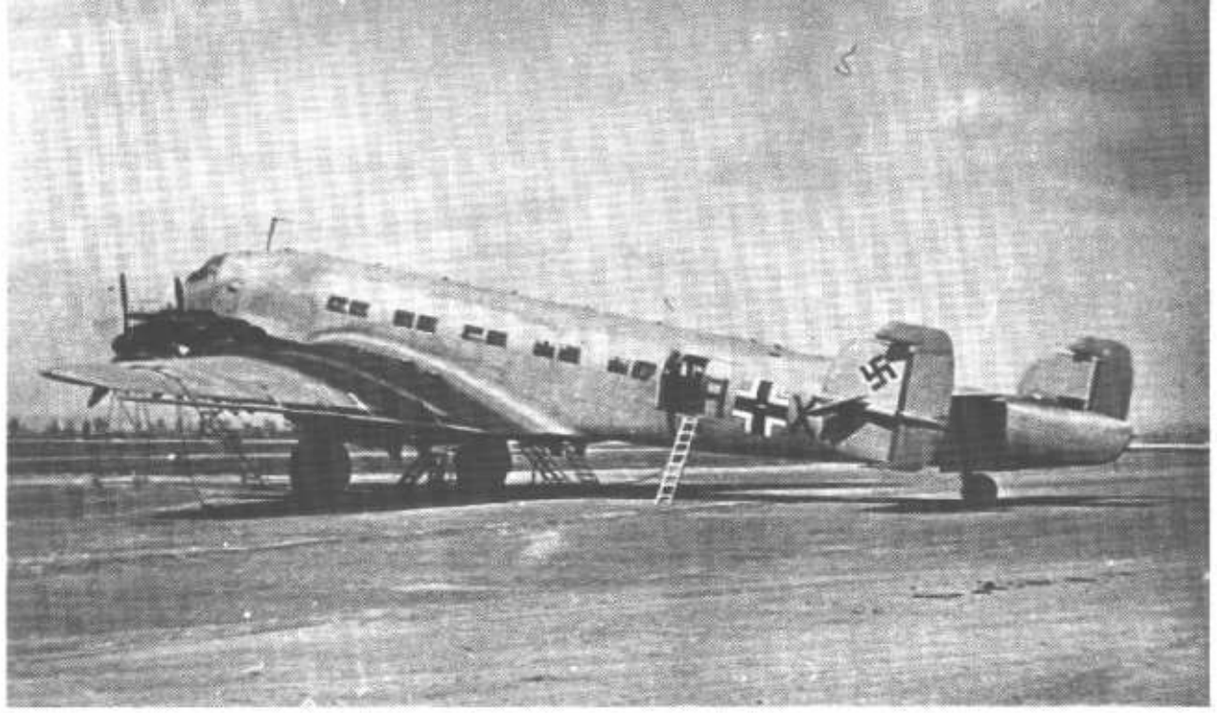
The **Junkers Ju 89** was a mid 1935 contender, along with the Dornier Do 19, for a long-range, four-engined strategic bomber evolved under the so-called "Ural Bomber" specification. Three prototypes of each design were authorized by the fledgling air arm with considerable backing from the new Luftwaffe's first Chief of Staff, General Leutnant Walter Wever. Talented Dip. Ing. Ernst Zindel of the Junkers aircraft and engine works succeeded in producing a design of considerable merit, the Junkers 89.

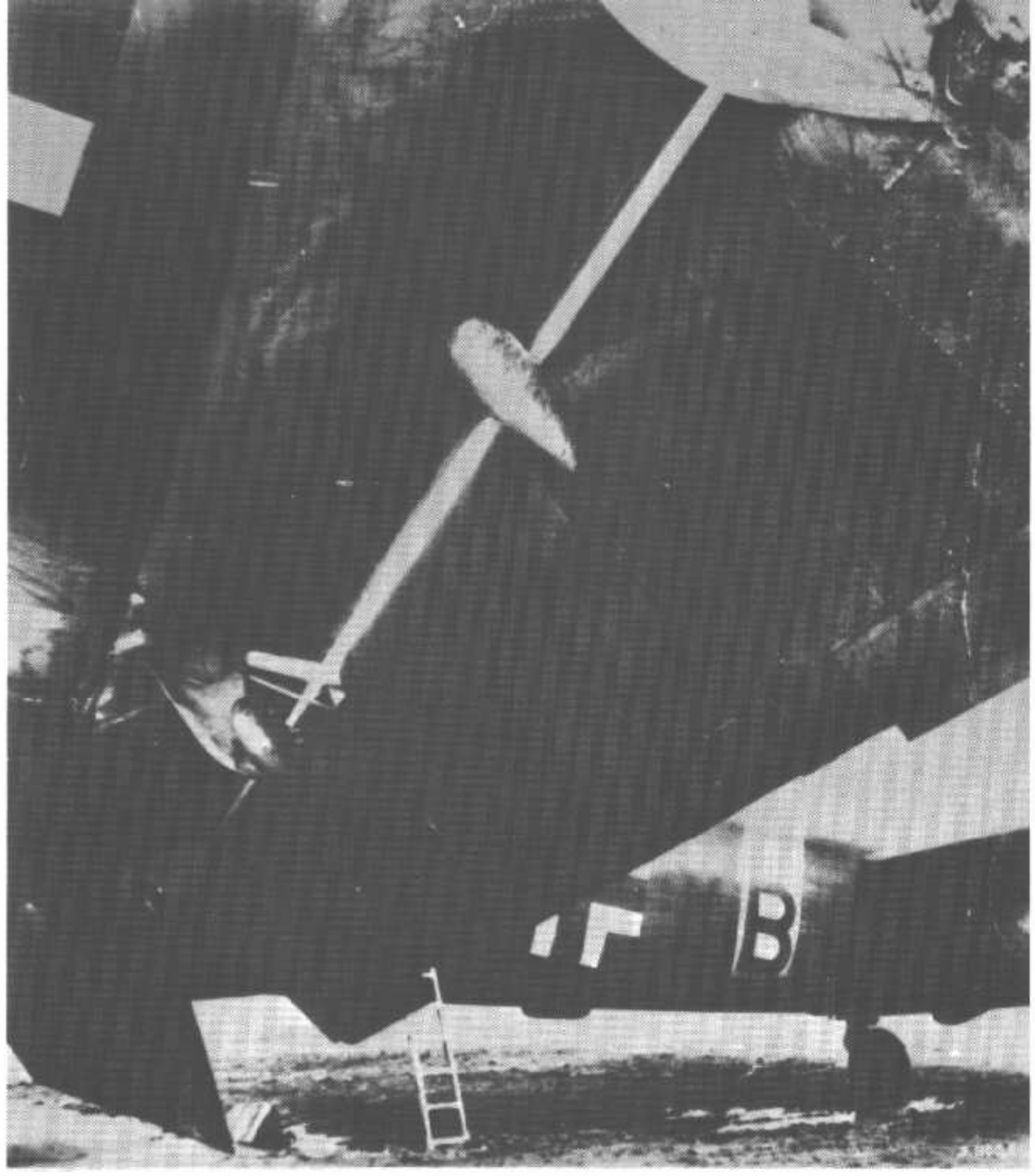
Unfortunately for these new bombers a tragic accident on June 3, 1936, claimed the life of General Wever. His successor, Albert Kesselring, was at that time hardly a staunch supporter of strategic bombers. After months of inconclusive bickering the whole "Ural Bomber" program was halted on April 29, 1937. By this time Junkers had completed two prototypes of its Ju 89 and were well along on sub-assemblies for a third machine. However, before the demise of the Ju 89, permission was granted by the Air Ministry (RLM) to convert the third Ju 89 prototype into a commercial transport version. Designated **Junkers Ju 90**, the new aircraft design began as a private Junkers venture in April 1936, emerging as a promising transport for Deutsche Lufthansa in August 1937. Ultimately a total of sixteen Junkers Ju 90 transports were completed and ironically, only limited Lufthansa (DLH) employment was attained prior to most being impressed by the Luftwaffe.

Later in an effort to increase the capacity and performance of the Ju 90, Dipl. Ing. Kraft investigated the possibility of enlarging the Ju 90 providing that more powerful engines could be obtained. Known initially as the Ju 90S (Schwer/Heavy) design, studies proceeded smoothly from 1937 to 1939 when the project was transferred to the former Letov plant at Letňany in German occupied Czechoslovakia.

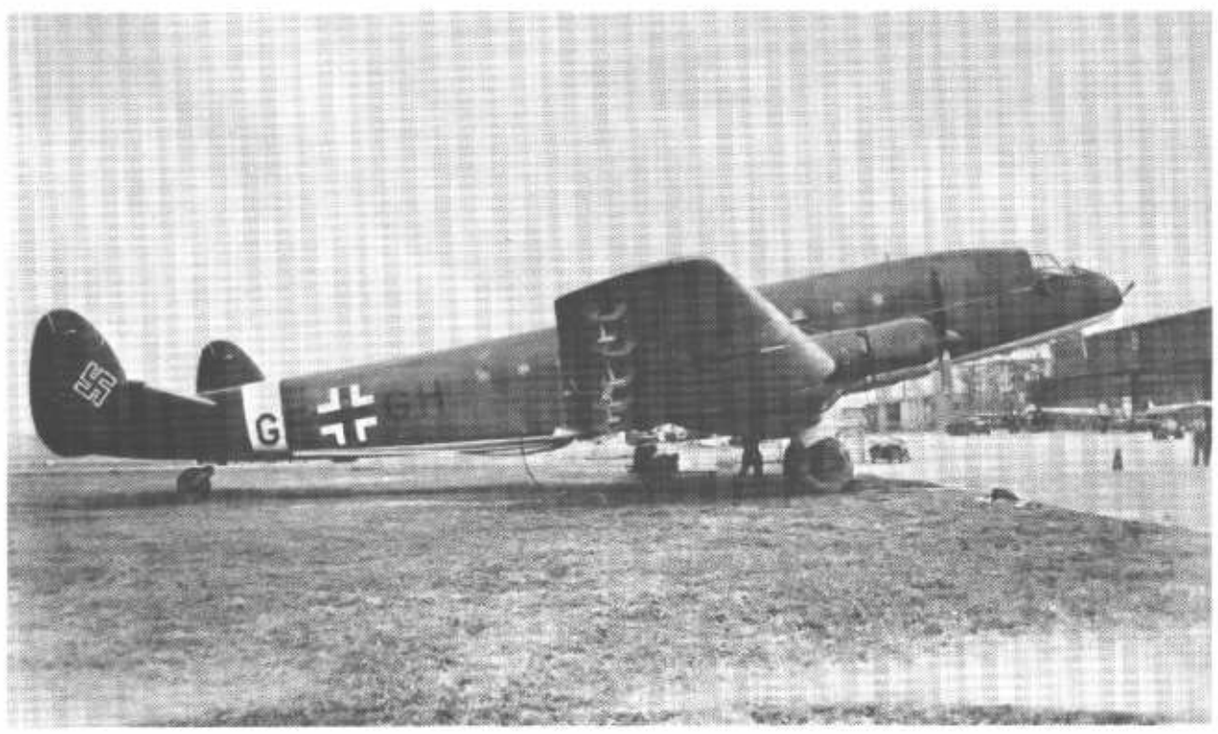
There Herr Kraft supervised the Ju 90S program with Letov being responsible for completing a mockup and structural testing. Actual prototype construction was destined to be undertaken in Germany at Junkers Dessau facility. The opening of WW II in Europe curtailed DLH activities with the Ju 90 and those aircraft not actively required by the Luftwaffe were returned to Dessau for Ju 90S component tests. Concurrently the RLM assigned the designation Ju 290 to the whole Junkers 90S program.

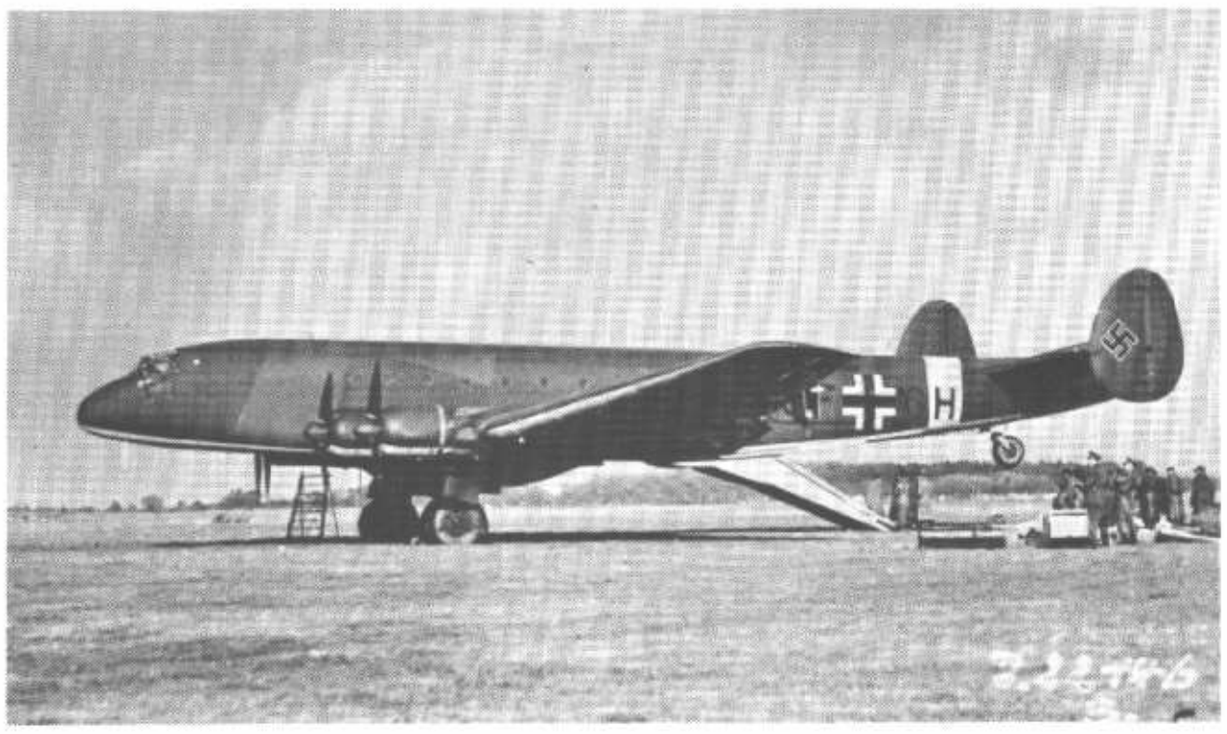
Several Ju 90 B-1 aircraft were utilized in the testing of such items as the BMW 801 MA engines (Ju 90 V4), BMW 801's plus blown flaps (Ju 90 V5), lengthened rear fuselage (Ju 90 V7), lengthened fuselage plus full armament (Ju 90 V8), and offset undernose gondola plus revised fin-rudder (Ju 90 V11).

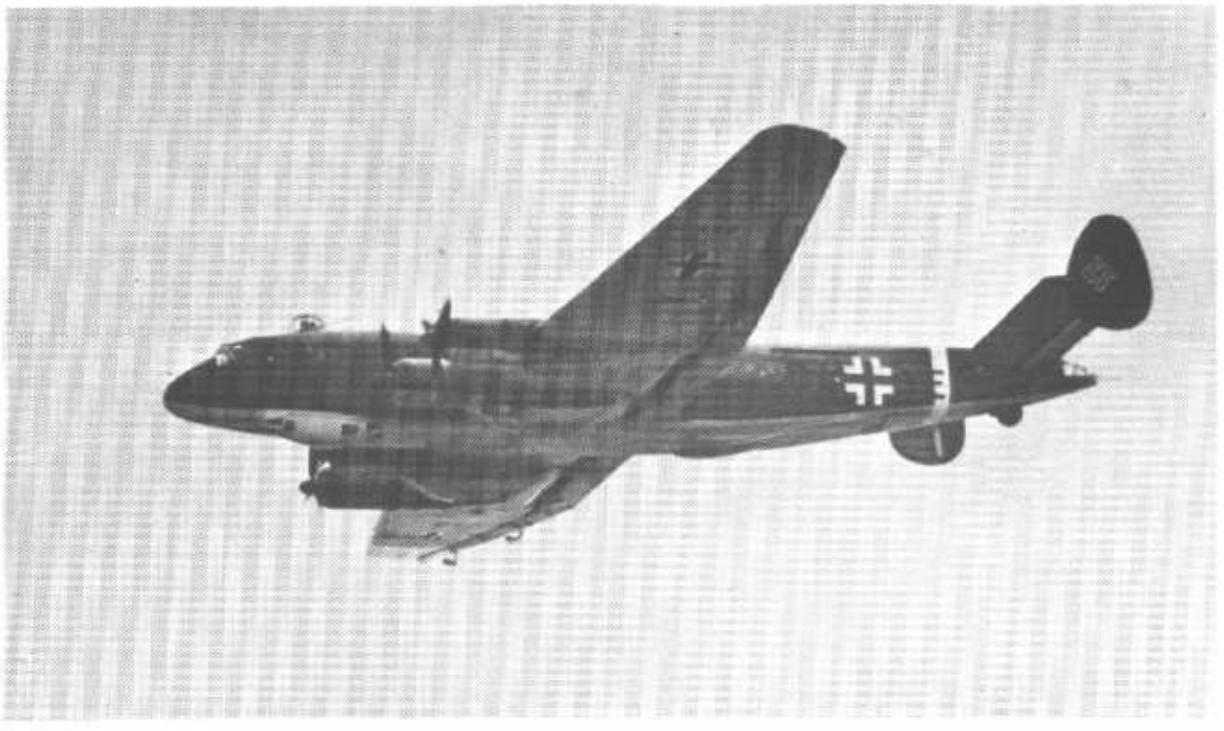


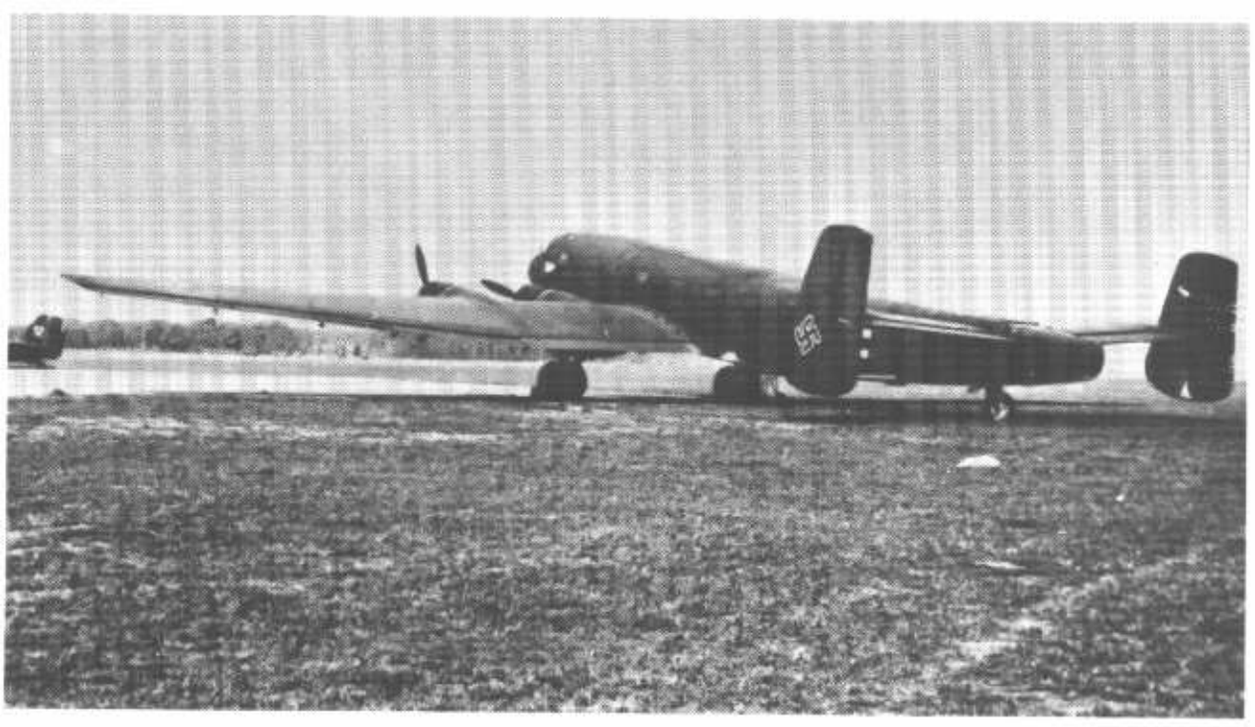


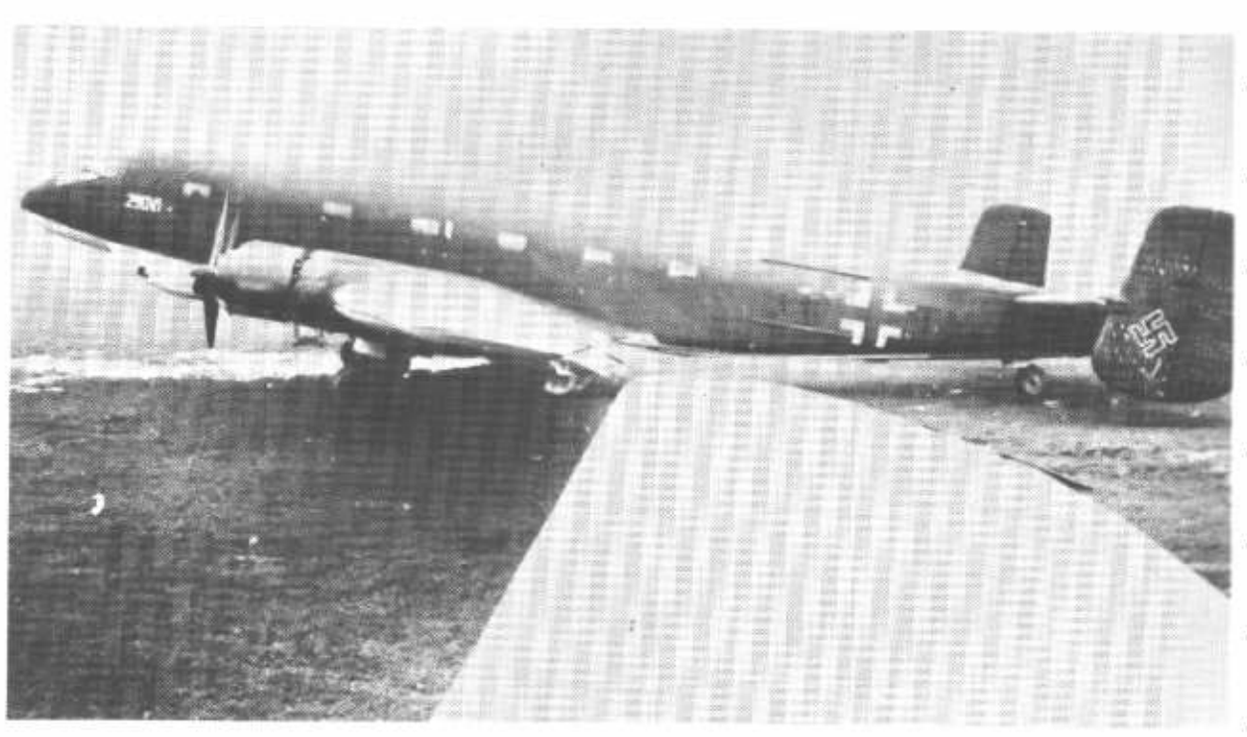
Various Ju 290 development aircraft include: (above) the Ju 90 V4; W. Nr. 4916; ?H+XA; modified to test the BMW 801; (right) the Ju 90 V5; W. Nr. 90 0001; ?H+XB; fitted with blown flaps; (below) the Ju 90 V7; W. Nr. 90 0003; GF+GH (initially D-ADFJ) which became the Ju 290 V3; and (bottom) the Ju 90 V8; W. Nr. 90 0004; DJ+YE (initially D-AQJA) becoming the Ju 290 V2. Both the Ju 90 V7 and V8 employed an elliptical fin-rudder of unique design. Subsequent Ju 290's received the more angular type.

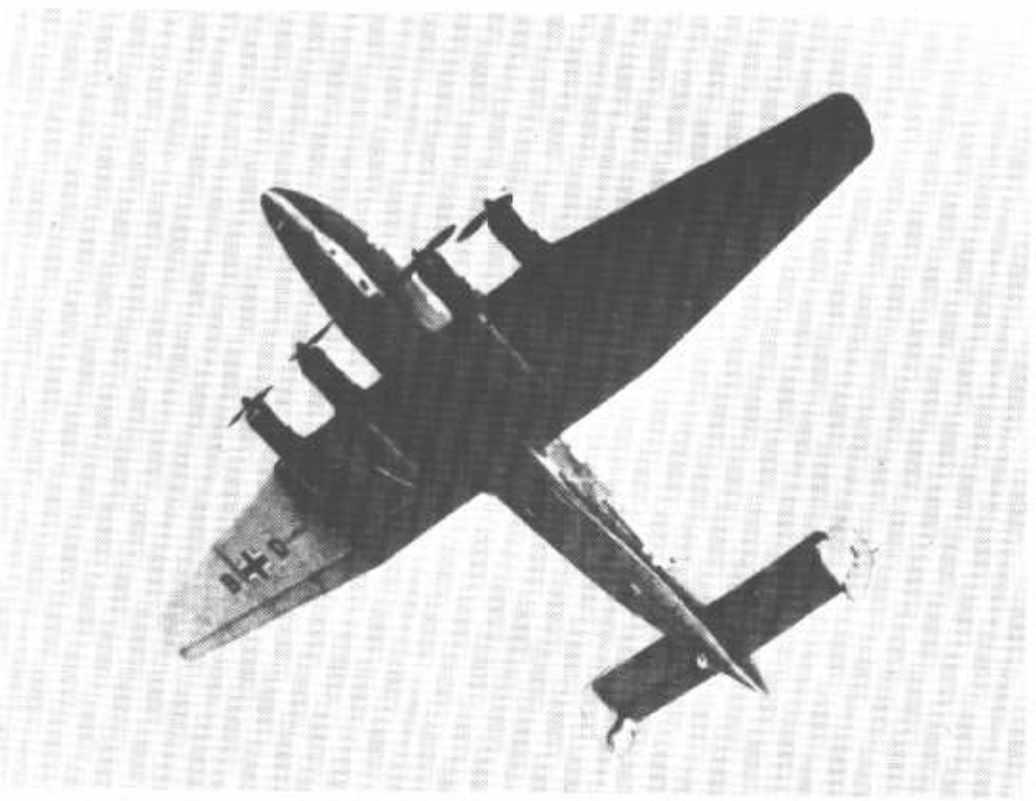


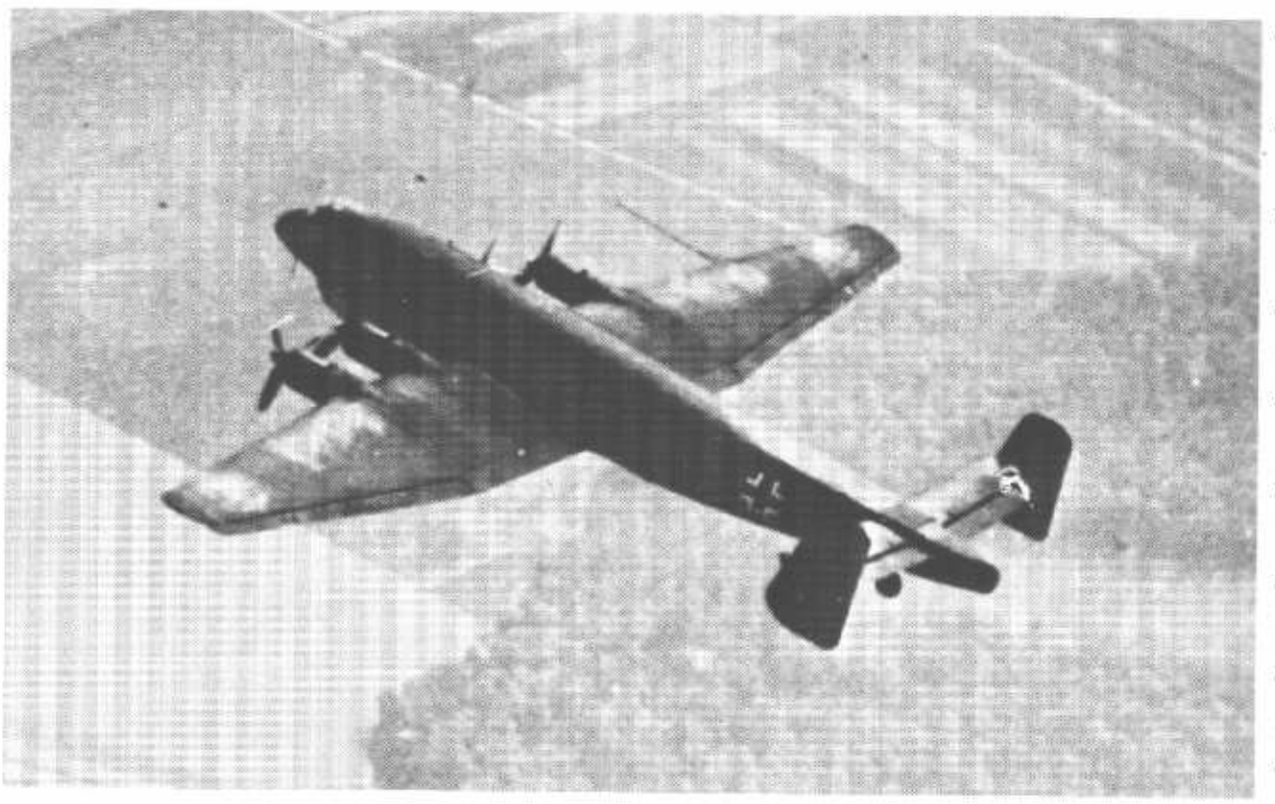




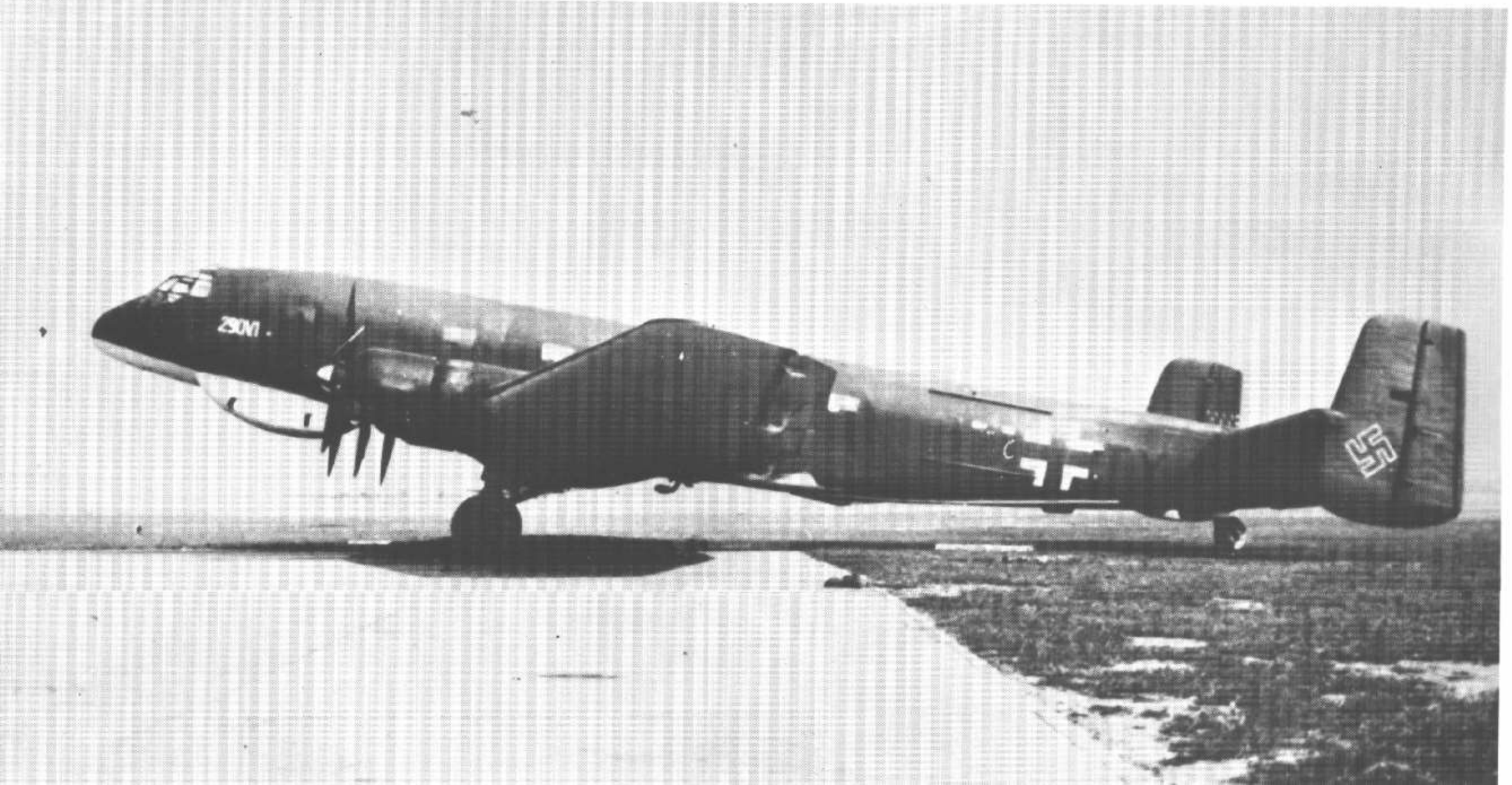


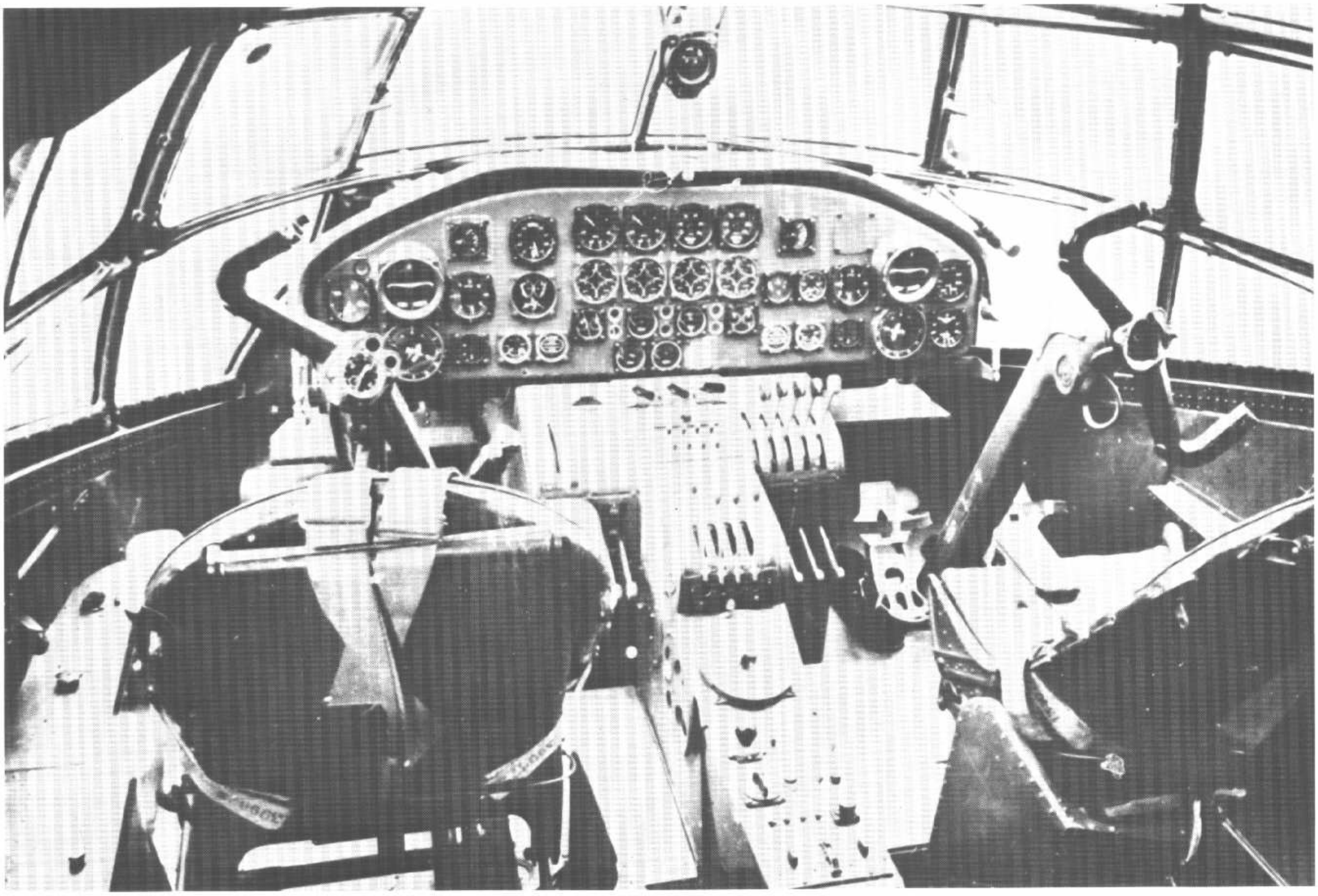


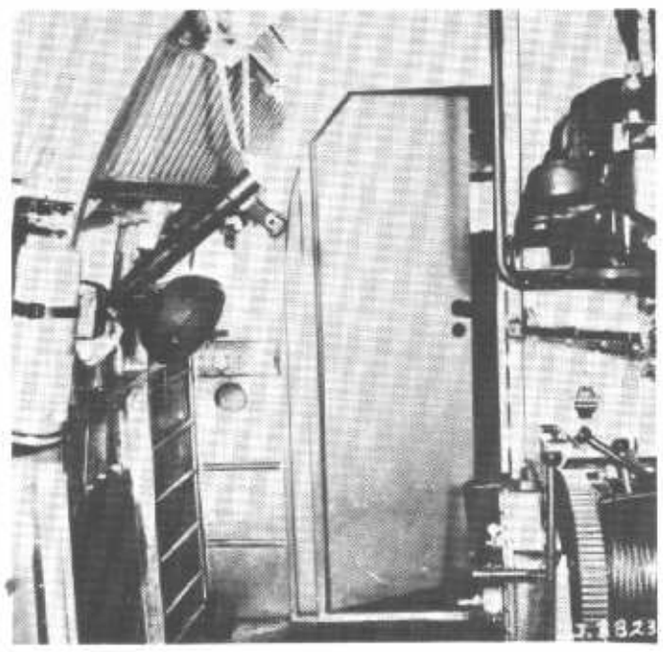




All the photographs on this page and page 7 depict the Ju 290 V1 which began its career as the Ju 90 V11; W. Nr. 90 0007. Although the offset nose gondola was fitted, no armament was installed. In spite of its size the two-ninety was a graceful airplane with well-proportioned lines. This prototype was lost in the struggle for Stalingrad as recounted on page 28.

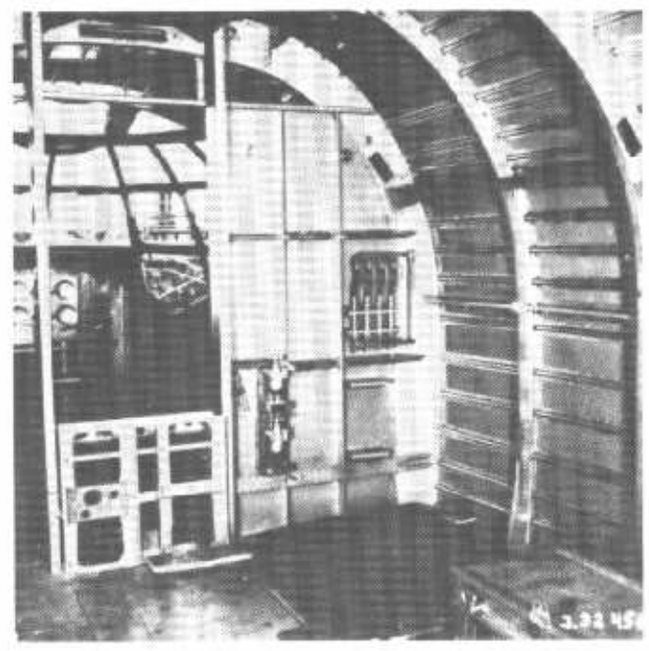


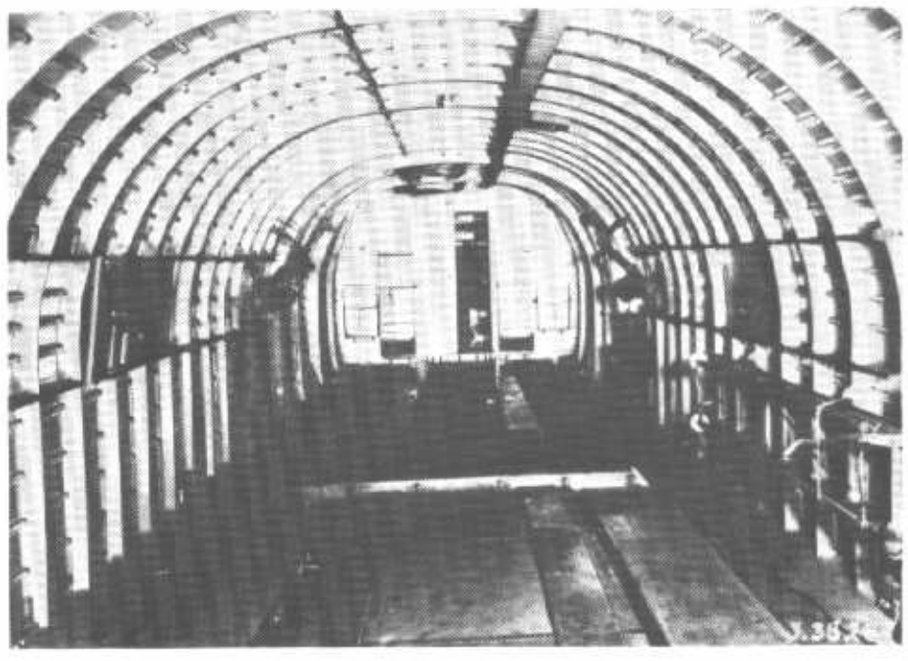


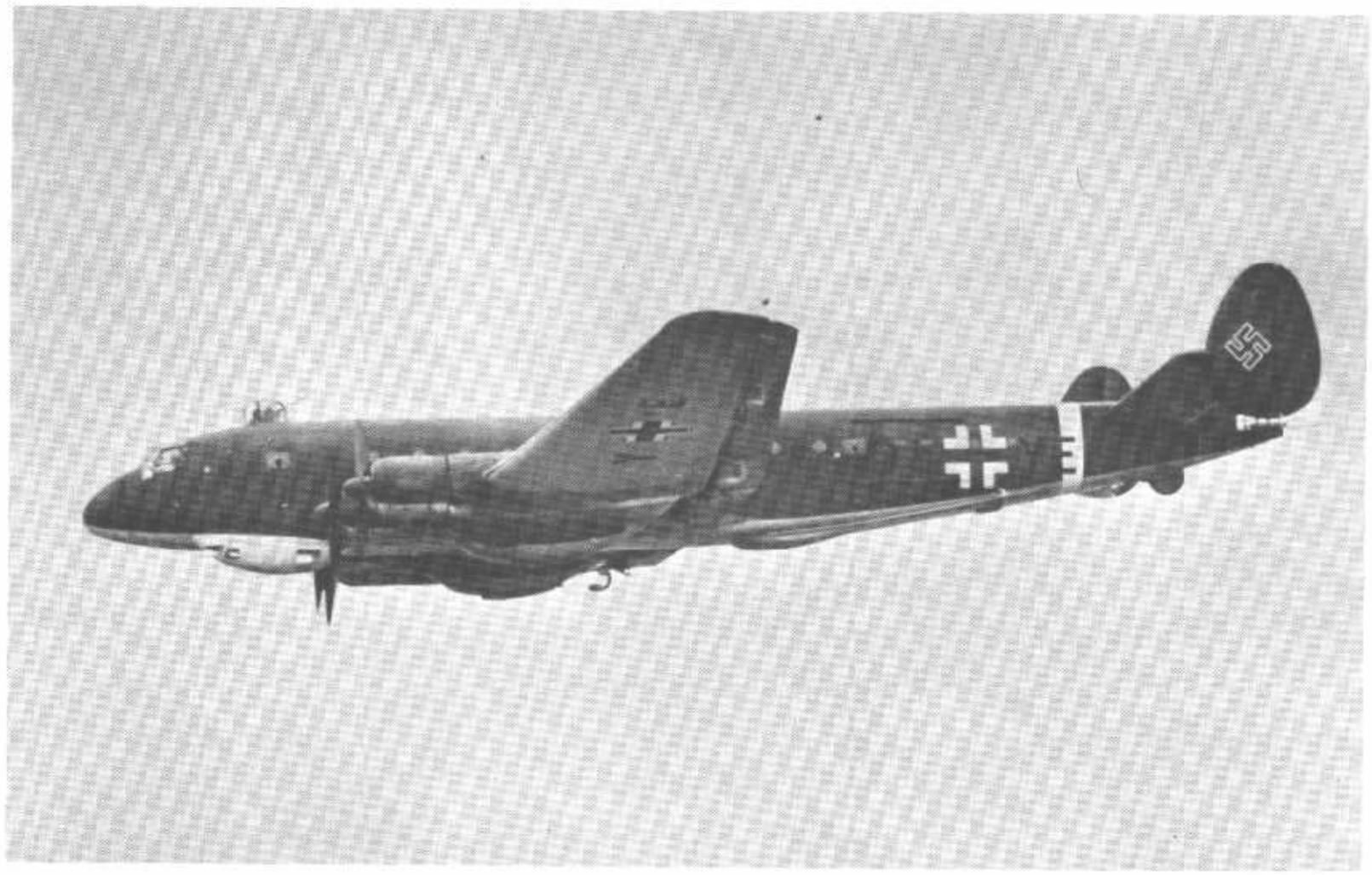


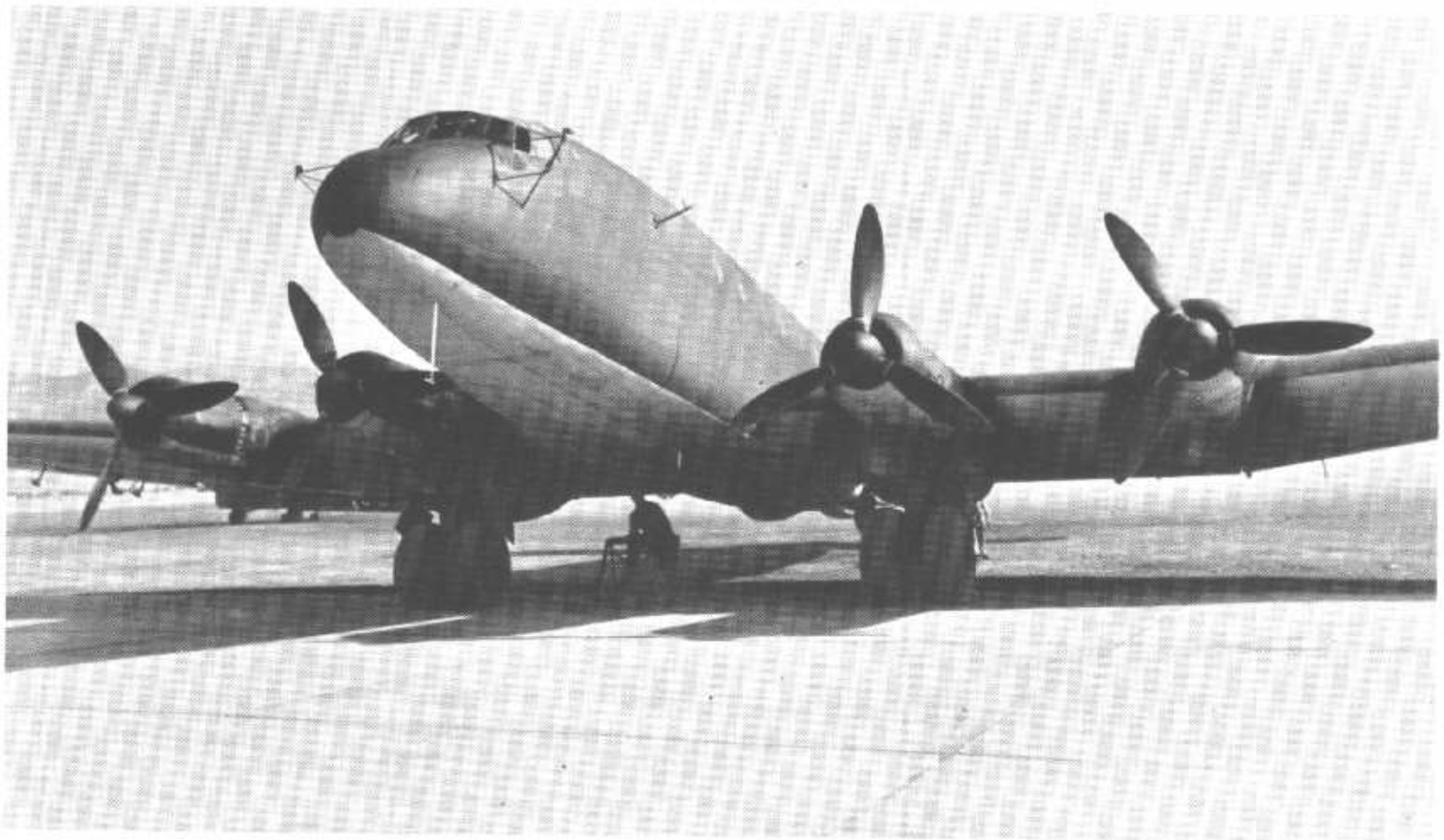
The last mentioned test aircraft, the Ju 90 V11, also was modified by increasing the wing span from 118 ft 1-1/3 in to 137 ft 9-1/2 in and by replacement of round fuselage windows with rectangular ones. In this form it was redesignated **Junkers Ju 290 V1** and began flight trials in August 1942. Simultaneously two additional Ju 90's were redesignated and allotted to the 290 program as the **Ju 290 V2** (Ju 90 V8), and **Ju 290 V3** (Ju 90 V7).

All six photographs illustrate various internal features of the Ju 290 V1 including a spacious cockpit and freight area.









The Junkers plant at Bernburg was the designated Ju 290 production center where assembly facilities were steadily completed until, by mid 1942, work began on the first preproduction models.

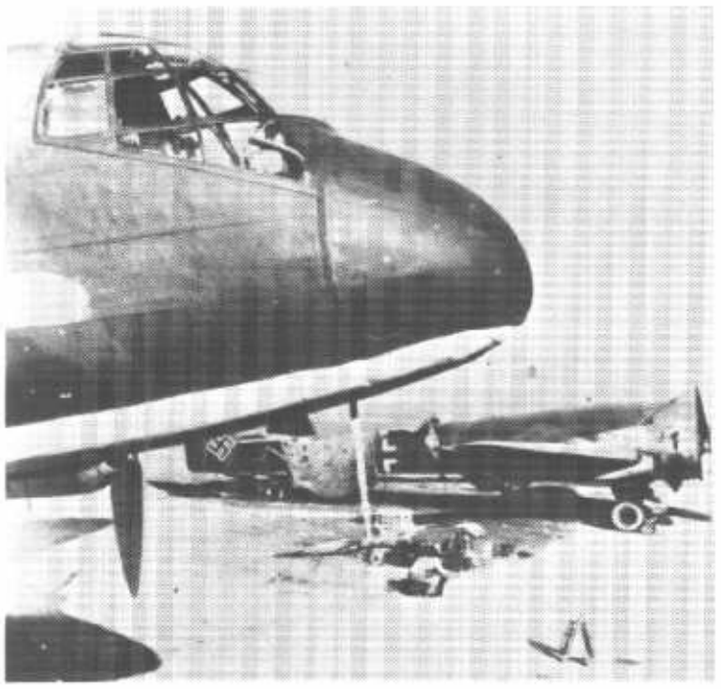
THE JUNKERS 290A SERIES

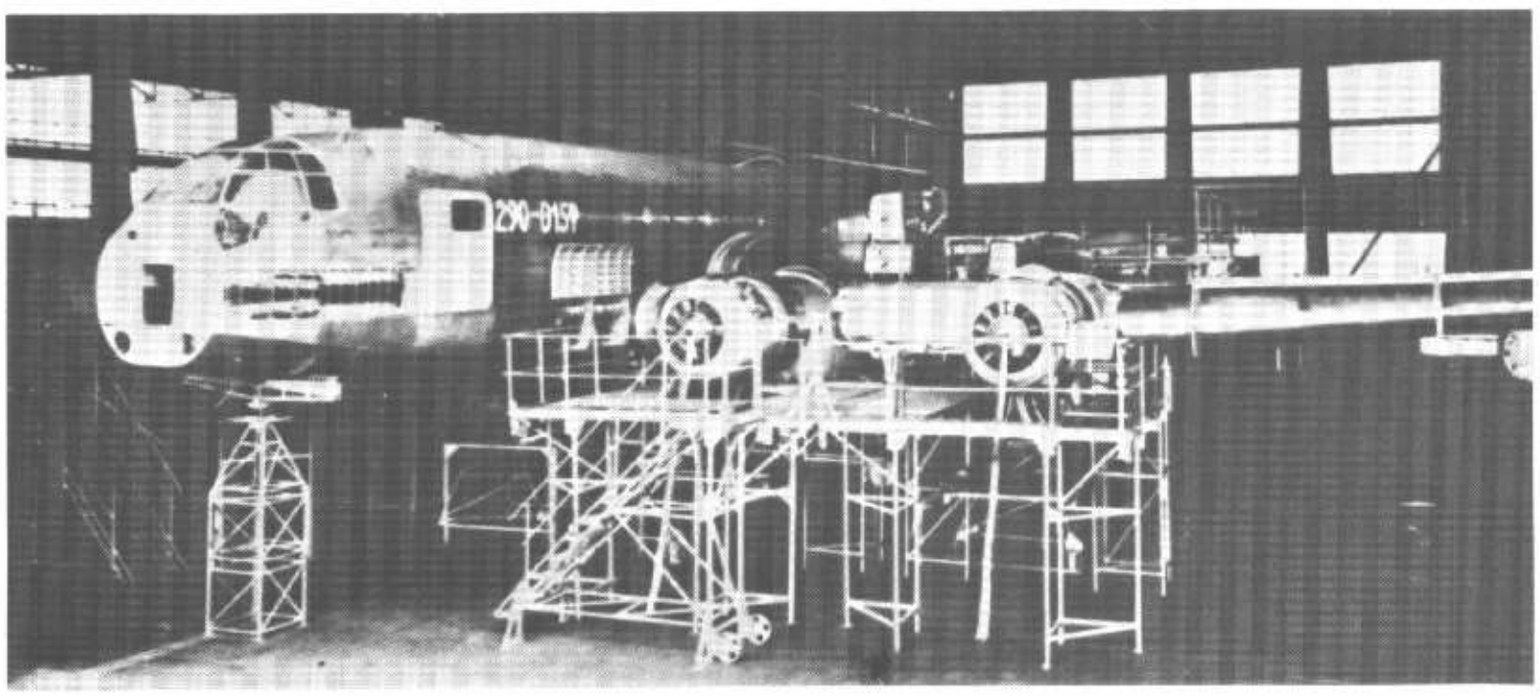
Two preproduction machines of the Anton series, known as **Ju 290 A-0**, were completed during October 1942 each powered by four BMW 801 L-2 radials developing 1,600 hp for takeoff. These two transports were not fitted with armament and were retained by Junkers as test aircraft.

Early in 1943 an initial production batch of five **Ju 290 A-1's** powered by four BMW 801 L-2 radials were completed at Dessau. These transports were fitted with defensive weapons similar in calibre and location to the Ju 290 V2. Three of the aircraft were used in the North African air lifts with two subsequently being lost. Werk Nummern 0152 crashed at Megrine at Bizerta (Sidi Ahmed), approximately 45 days prior to the fall of Tunis. Werk Nummern 0154 built in February 1943, also crashed at Megrine when the runway was overshot. Both aircraft were damaged extensively and both were abandoned. Werk Nummern 0153 was taken on strength by I./Versuchsuerband OKL and operated in the Crimea. Werk Nummern 0155 was used for fuselage and wing center section endurance tests by the Letov factory of Prague-Letňany airfield during the winter of 1942-1943.

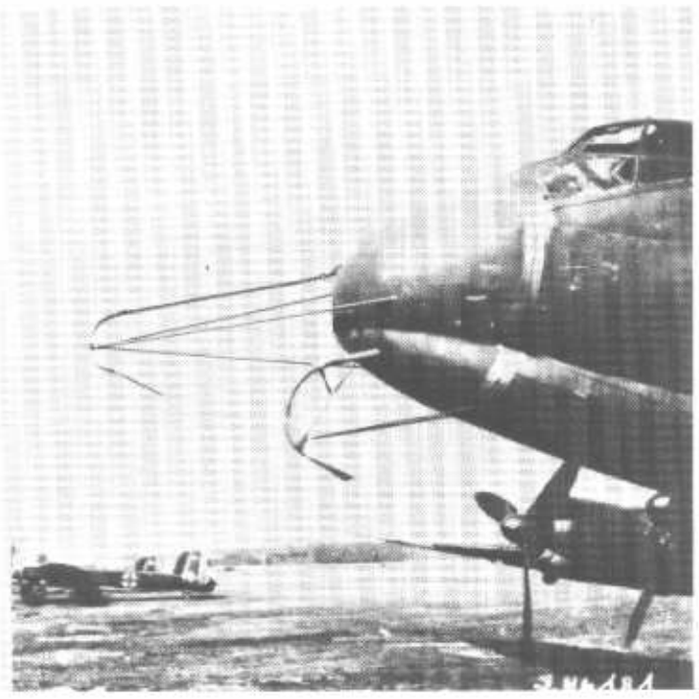
Production continued during the summer of 1943 with three aircraft of the improved **JU 290 A-2** series. Defensive armament was upgraded by the addition of a second hydraulically operated dorsal turret containing a 20 mm cannon. It was with these three aircraft that the Ju 290 entered the maritime reconnaissance role, shadowing Allied convoys and forwarding their position, course and speed to U-boat relay stations. Each of the aircraft was fitted with search radar in the forward nose known as FuG 200 "Hohentwiel." This radar system with its awkward appearing antenna was capable of locating targets over 60 miles distant when flown at an altitude of 3,280 ft. A new sighting blister was added to the rear gunner's position as a step toward improving visibility from the tail.

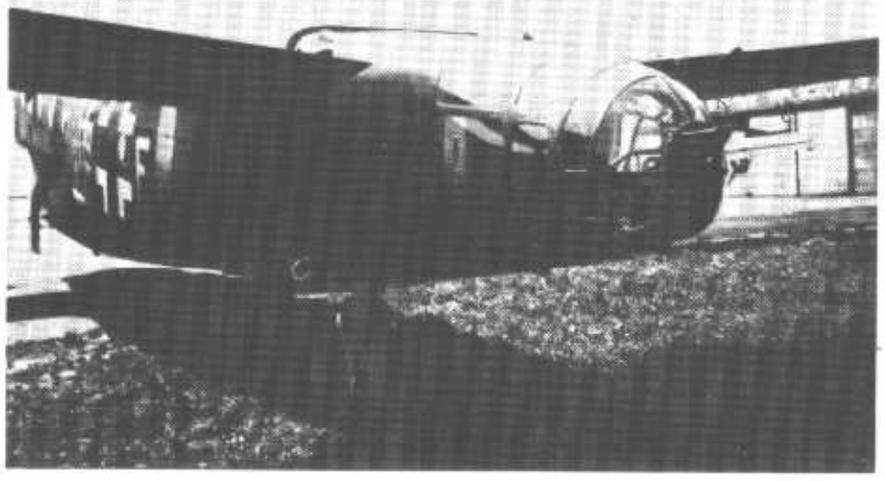
Top: The Ju 290 V2 (Ju 90 VB) in flight.
Bottom: Two photographs depict the Ju 290 V3 (Ju 90 V7). Note exterior rearview mirrors. Loading ramp was 16 ft 2 in long, 7 ft 8 in wide.

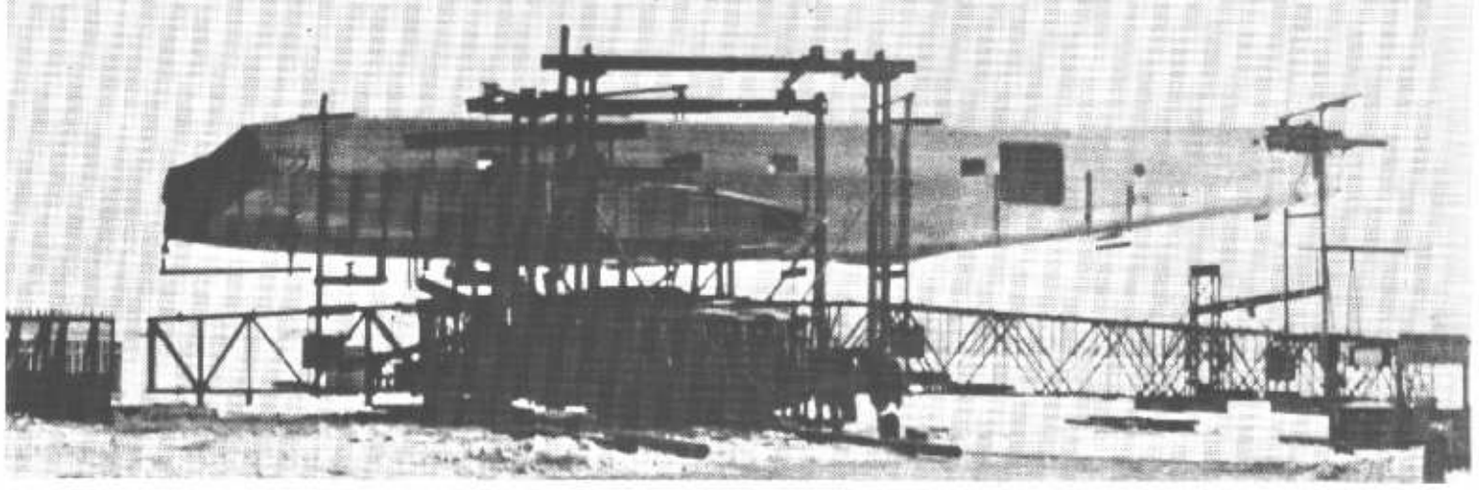




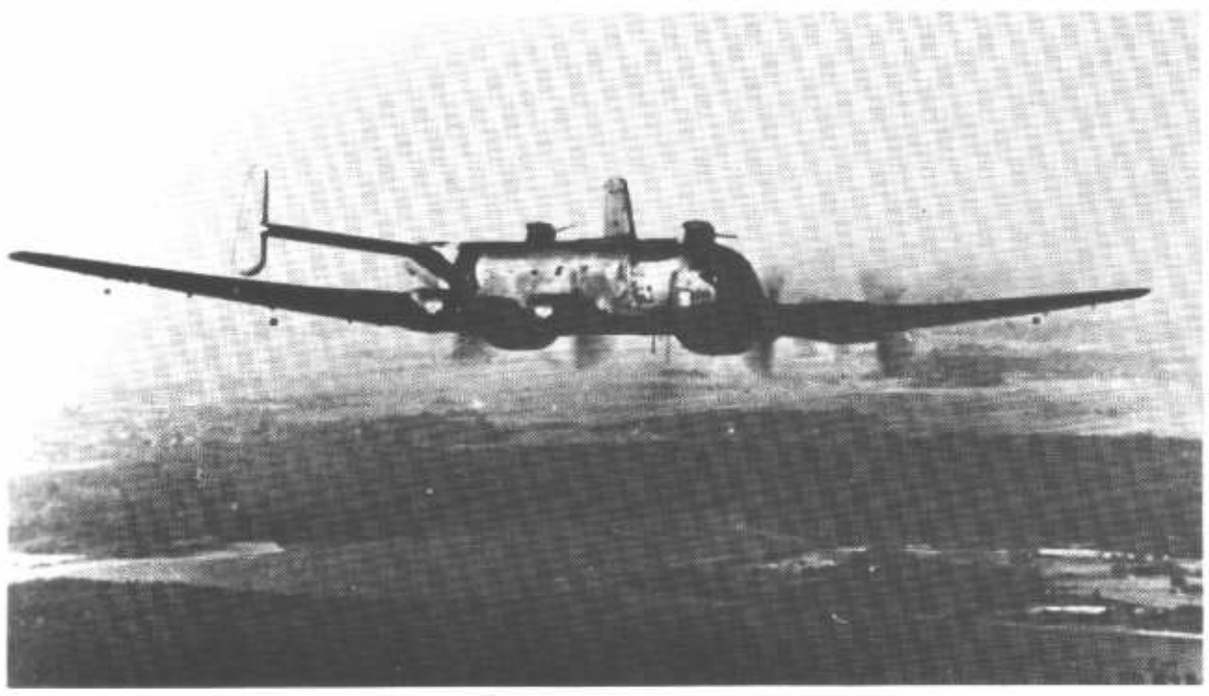
Top left: Ju 290 A-0; W. Nr. 0150 soon after completion. Top right: Ju 290 A-0; W. Nr. 0151 under construction. Left: Close-up of the second preproduction machine indicates Herr Gerisch as Flight Mechanic. Right: The second A-0 aircraft later was fitted with these unusual (and as yet unexplained) discharge tubes singly and with two as shown. Note two Ju 288 C-type prototypes parked alongside. Below left: Close-up of the Ju 290 A-1; W. Nr. 0152. Below right: The unique lower fin outline employed by the A-1 series is illustrated in contrast with the smooth design of the Ju 290 V1. Bottom: Ju 290 A-1; W. Nr. 0153, the second production aircraft. Interestingly, although this example was intended for use by Versuchsverband OKL, it has yet to receive the staffeln letter K (see p. 29).

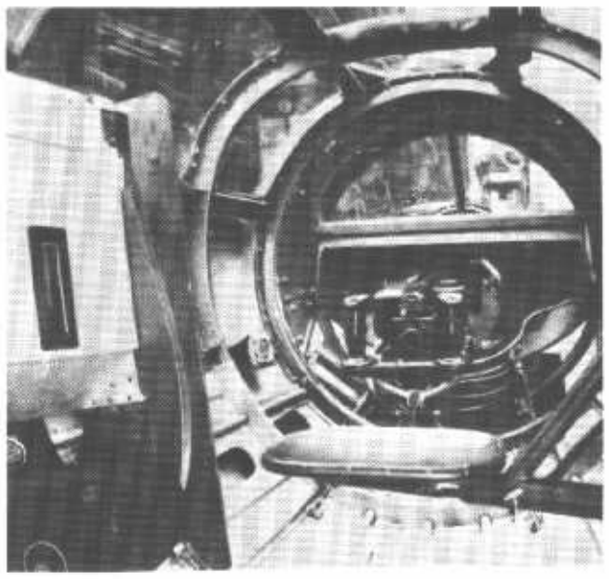


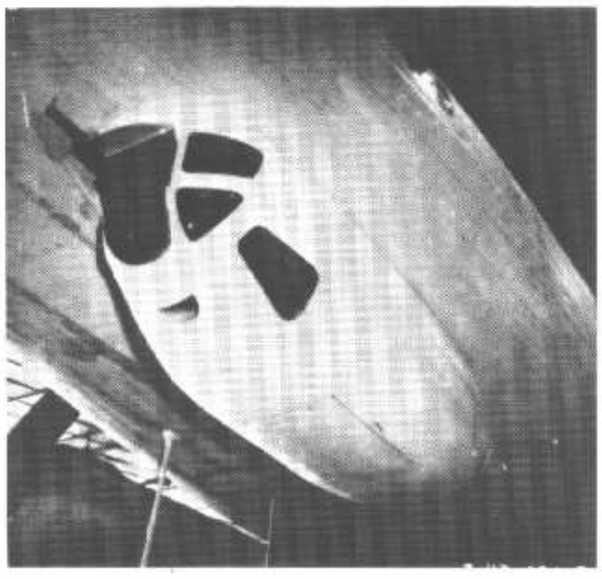


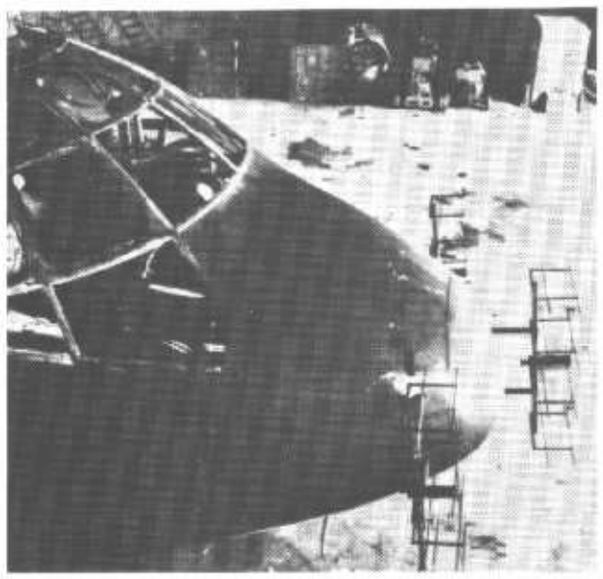


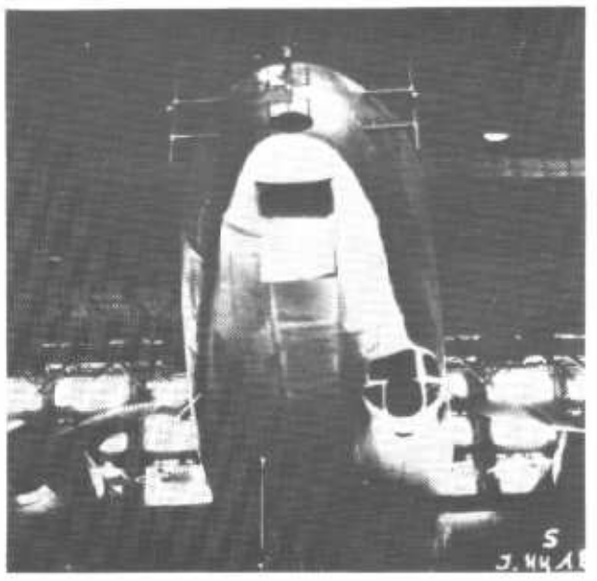
Top: Another view of the second Ju 290 A-1. Middle left: A close-up of the tail gun position known as the H-station (Heck/Tail). Above: The fourth Ju 290 A-1; W. Nr. 0155 being subjected to stress tests. Left: A familiar war-time photo is this view of the remains of the third Ju 290 A-1; W. Nr. 0154; found by Allied troops at Megrine field near Bizerta (Sidi Ahmed). Freight area measured 53 ft 5 in long, 9 ft 1 3/4 in wide and 6 ft 6 in tall.





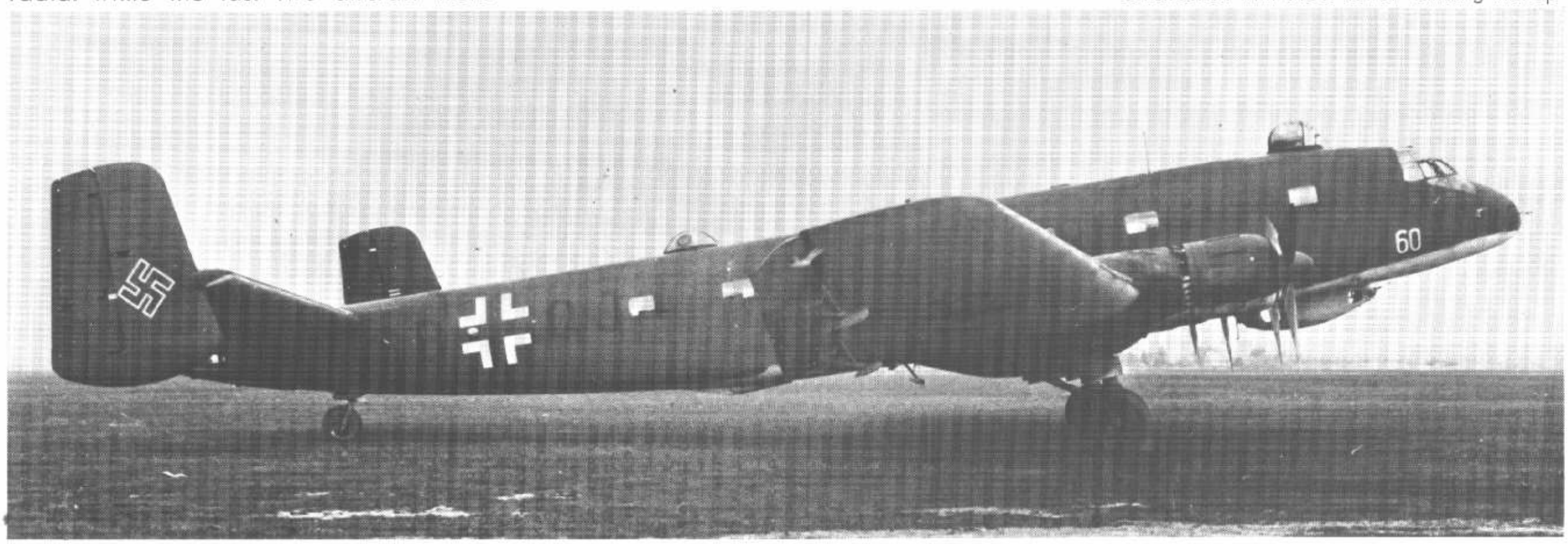


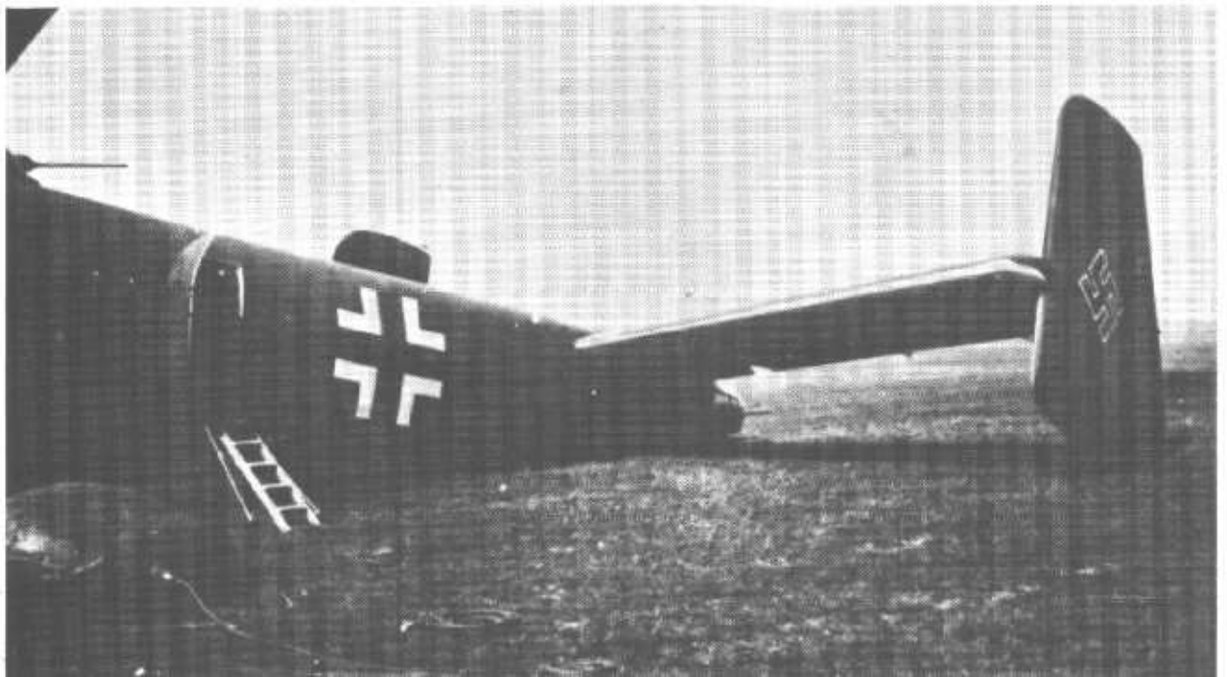


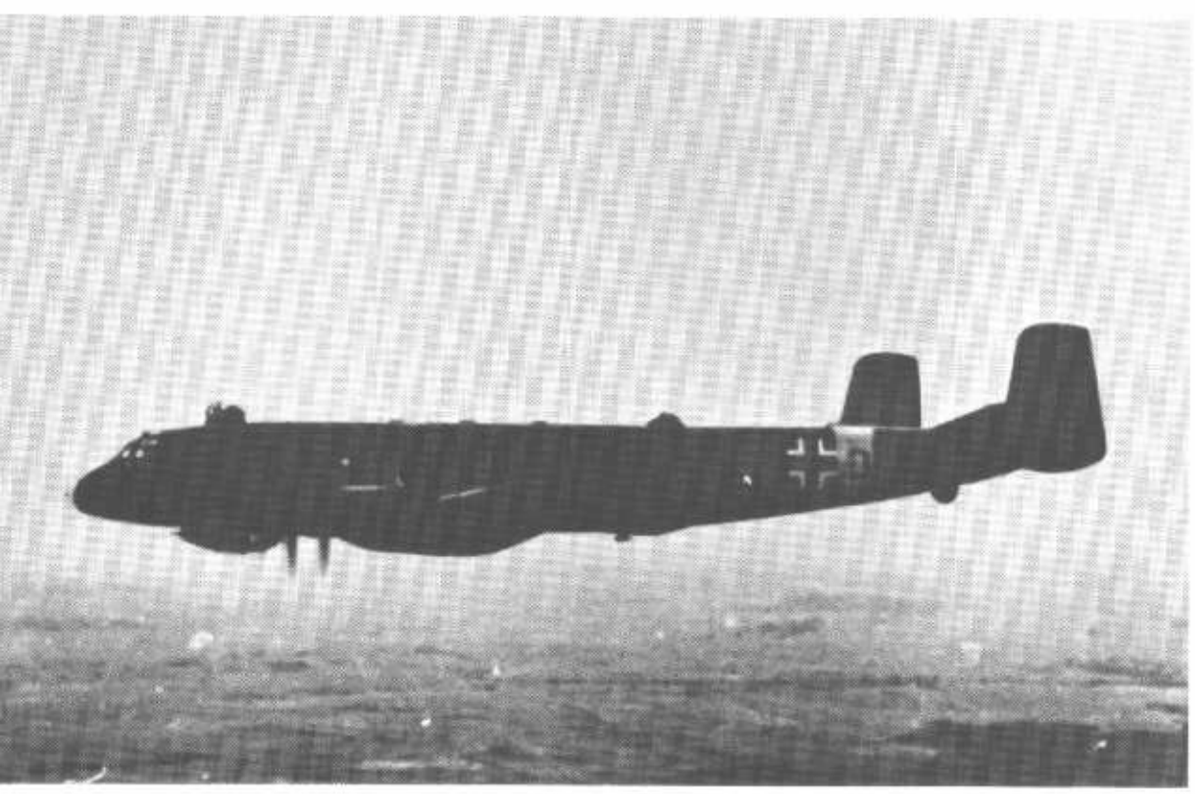


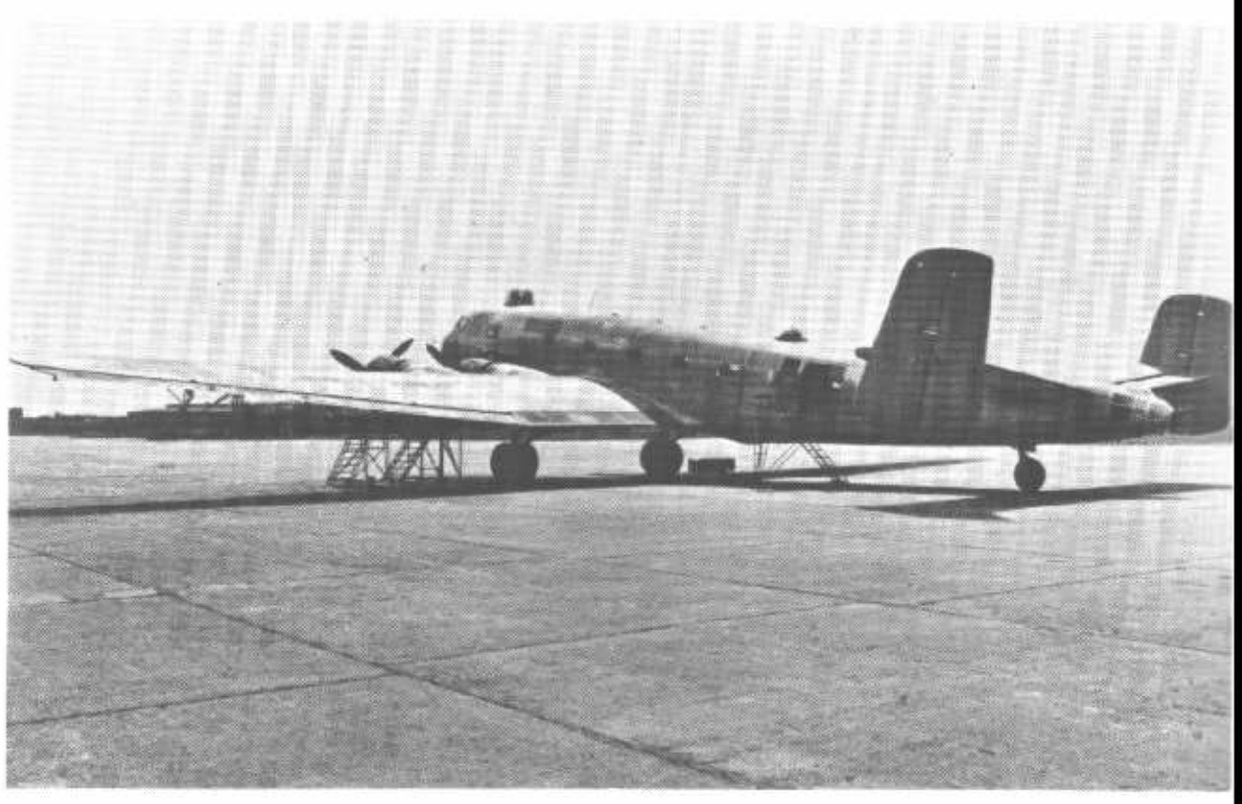
Following on the heels of the A-2 series the **Ju 290 A-3** appeared in the latter half of 1943. Only five models of this version were produced, with the first three examples receiving the BMW 801 L-2 radial while the last two aircraft were powered by the BMW 801 D-1. Substitution of the rear dorsal turret for a low drag Focke-Wulf FW 20 unit and the refinement of the gondola's design were recognizable external differences.

Top: Two inflight views of the second Ju 290 A-2; W. Nr. 0158. Four close-ups above reveal (l. to r.) tail gun position, nose gondola, FuG 200 antenna and nose. Below: Three views of the first Ju 290 A-3; W. Nr. 0160. Lower left: Photo reveals the Ju 252 V13 and V14 under construction with 0160. Lower landing mishap



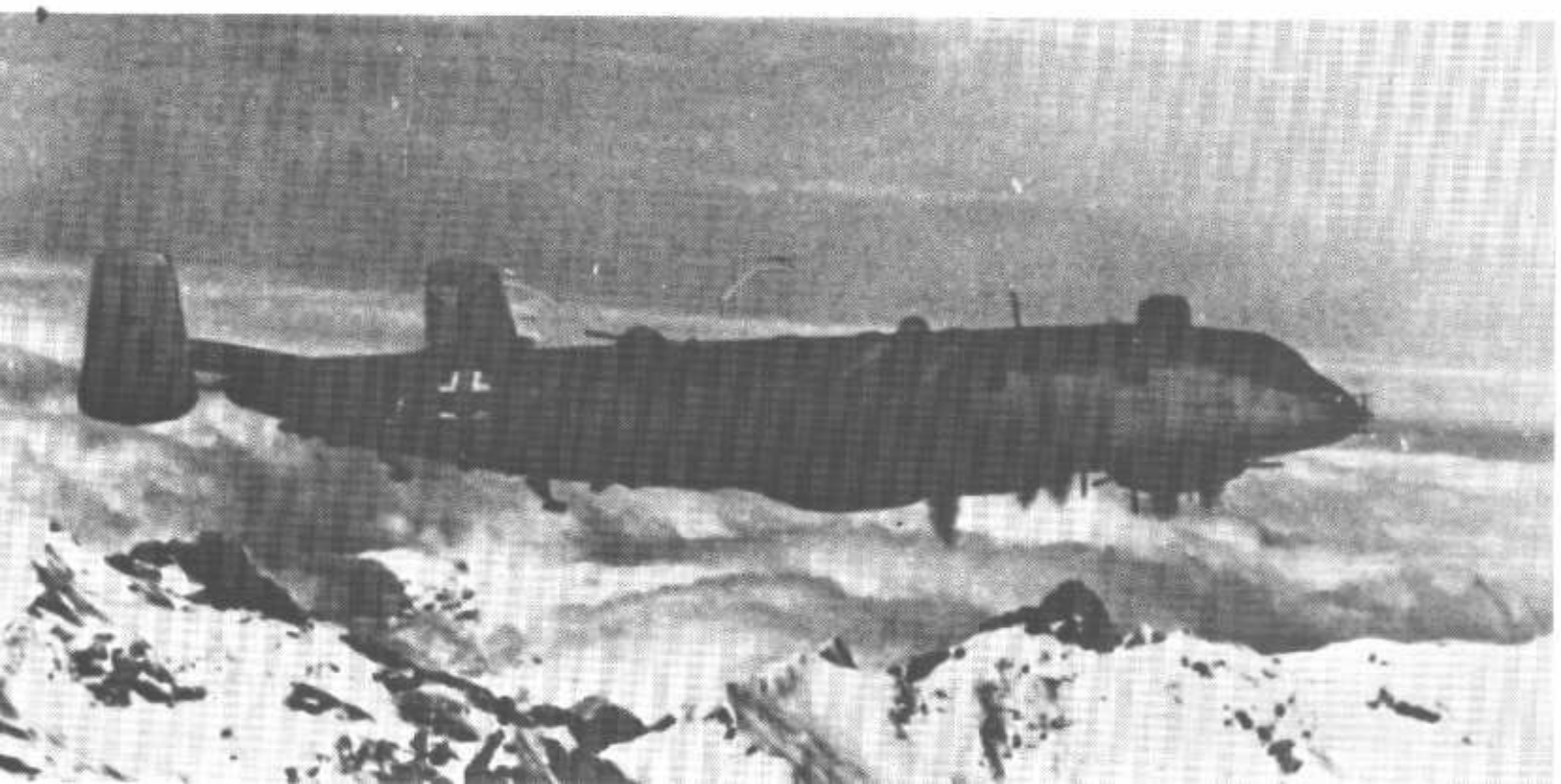


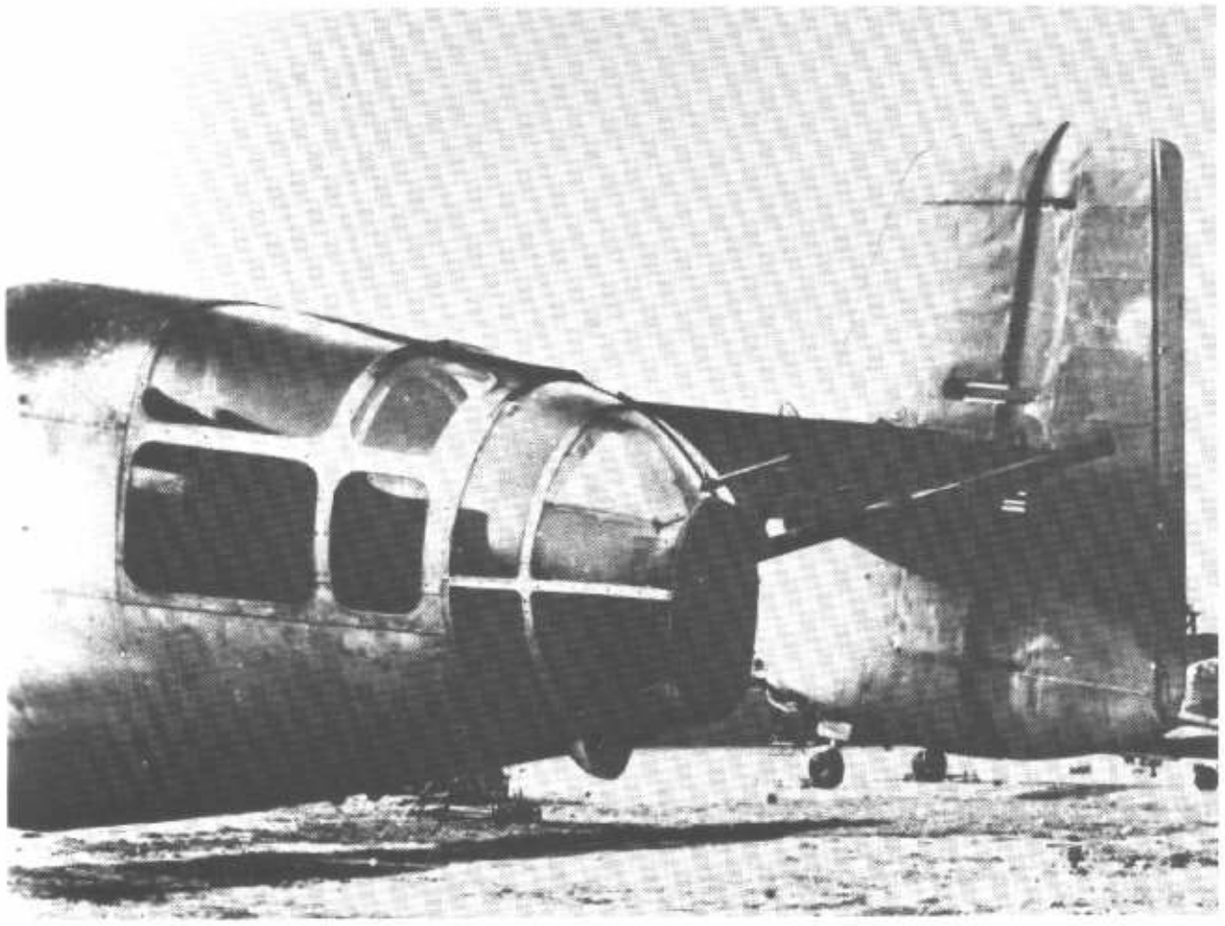


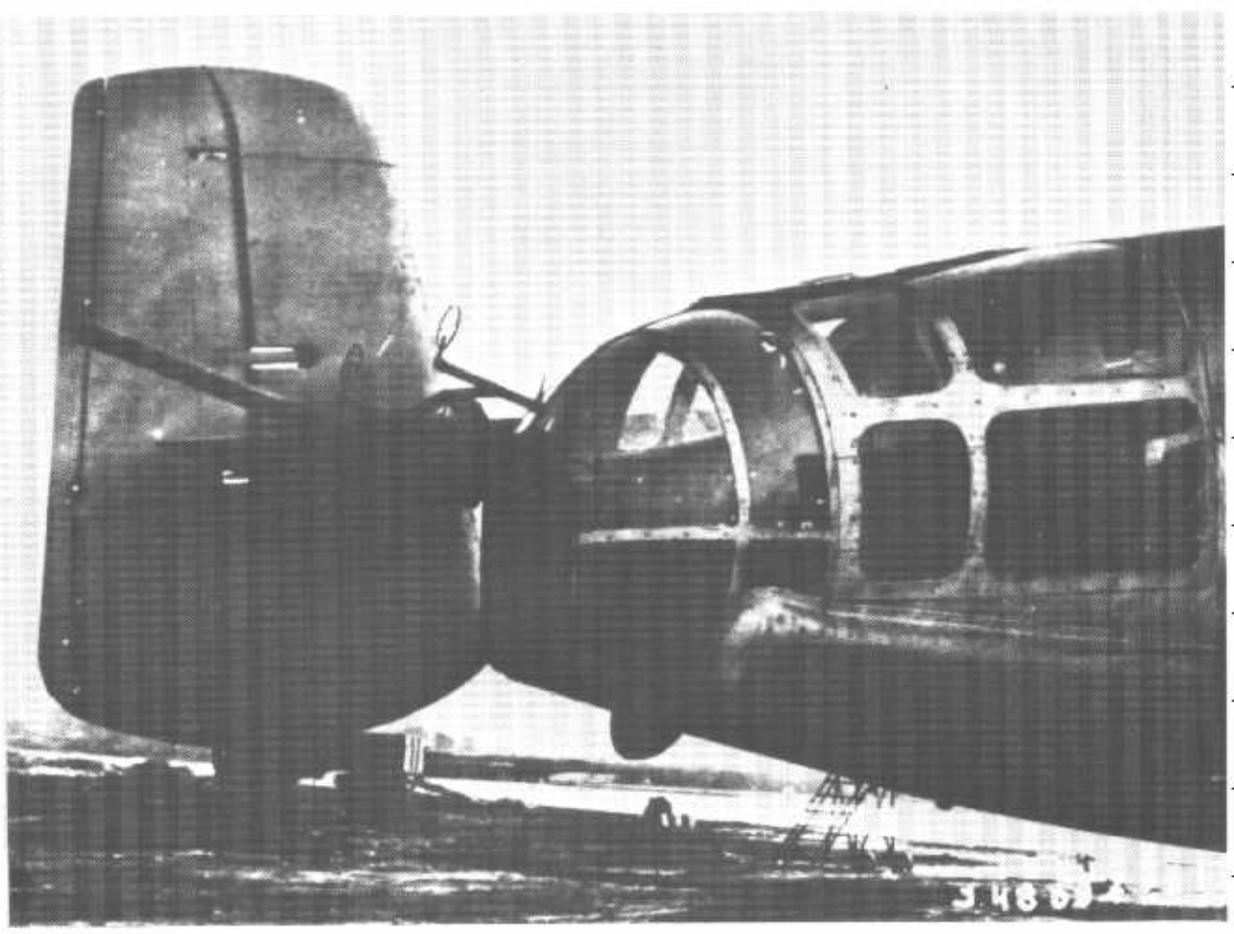


left: Ju 290 A-3; W. Nr. 0161; "Red Dora." right: The third Ju 290 A-3; W. Nr. 0162 ly completed. Above: Exhibited at Farnough in November 1945 as Air Ministry-57, Ju 290 A-3, W. Nr. 0161, the second Ju A-3, was camouflaged dark green upper aces with light greenish undersurfaces.

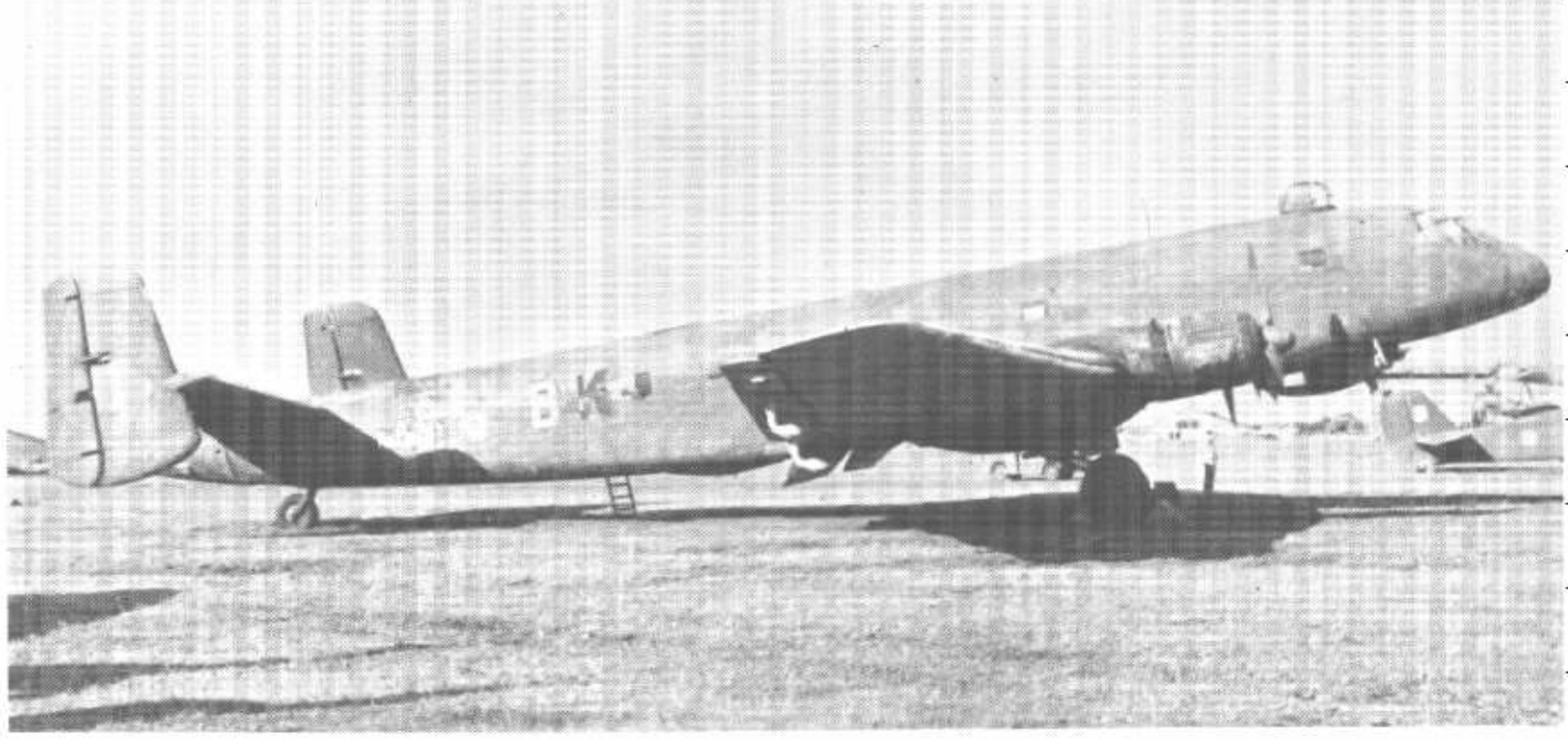
Lower left: Ju 290 A-3; W. Nr. 0162 9V+GK on patrol over Greece. This example later was shot down by Costal Command Mosquitos. Lower right: Ju 290 A-3; possibly W. Nr. 0163; fitted with an additional nonstandard nose beam machine gun.



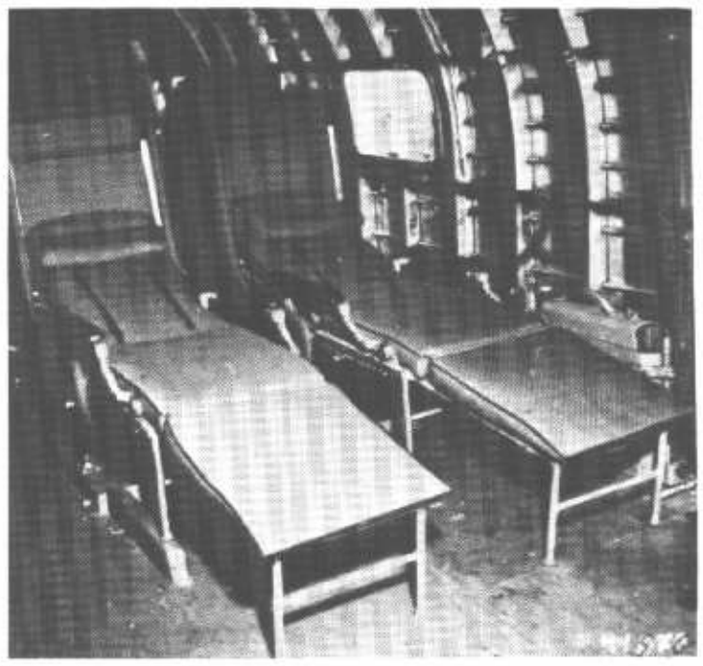


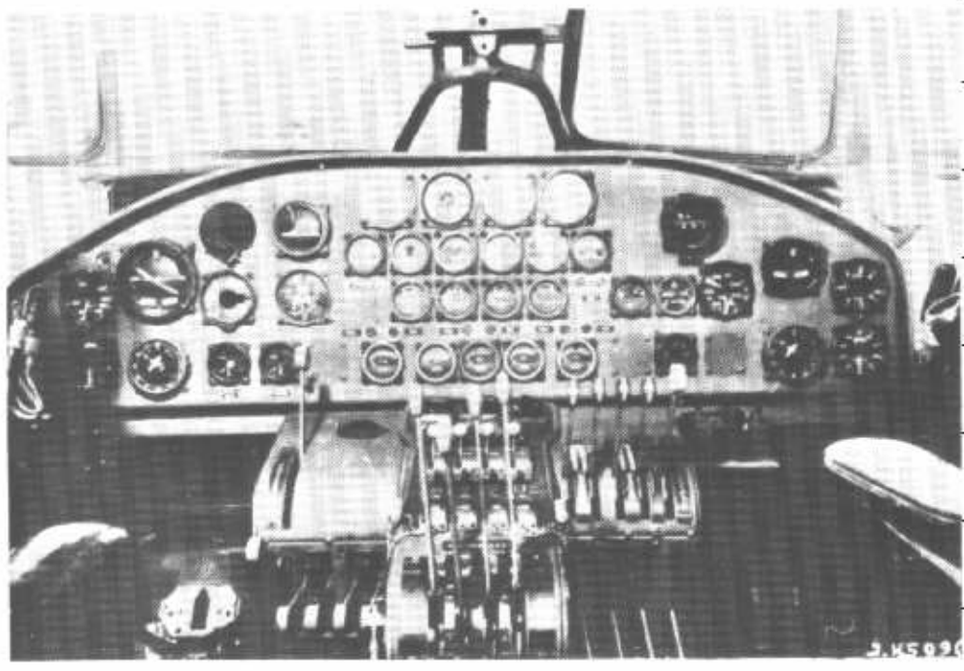


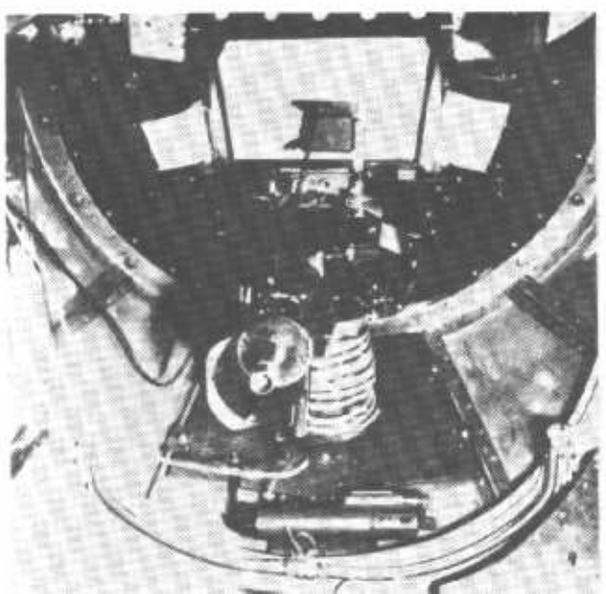
Photographs on this page depict various details of the Ju 290 A-3 series. Top two views illustrate port and starboard details of the tail gunner's position on W. Nr. 0160. Lost by the high contrast film is the bubble dome immediately above the enclosure. This feature was introduced first on the A-2 series. Photo right gives another view of AM-57 exhibited at Farnborough. Lower set of four photographs shows up interior and exterior views of the undernose gun position known as the C-station (C1 fore, C2 aft).

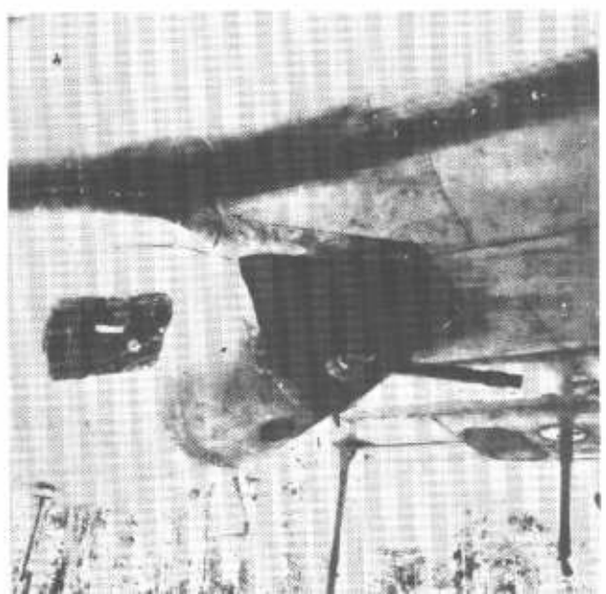


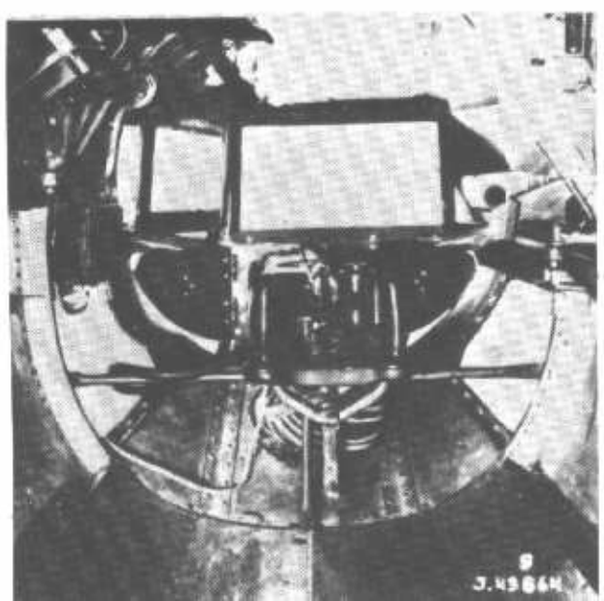
At least two Ju 290 A-3's survived hostilities. The one depicted by our cover photo was captured at Salzburg, Austria. The other aircraft, W. Nr. 0161, was exhibited in England as Air Ministry, AM-57. Air Ministry number 6 was allotted to a Ju 290 early in 1945. Little else is known of this particular machine.

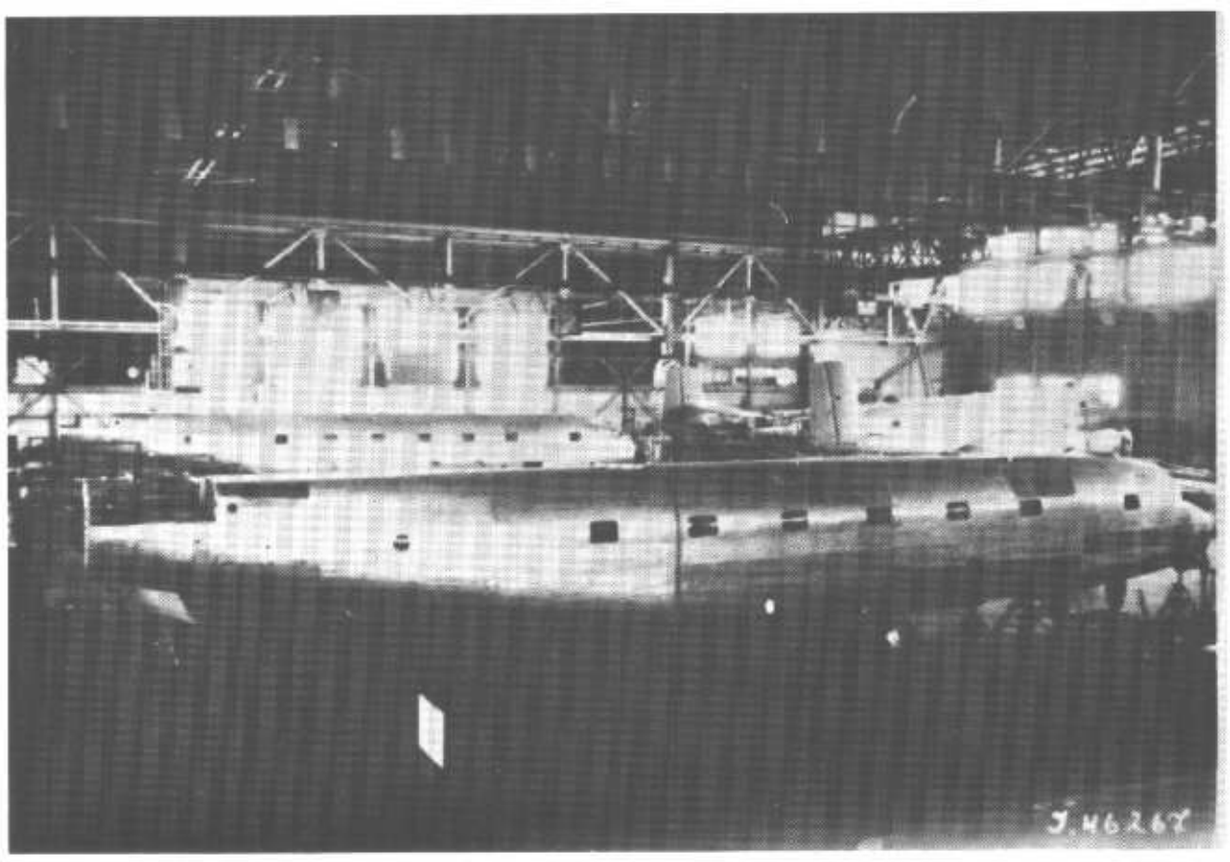


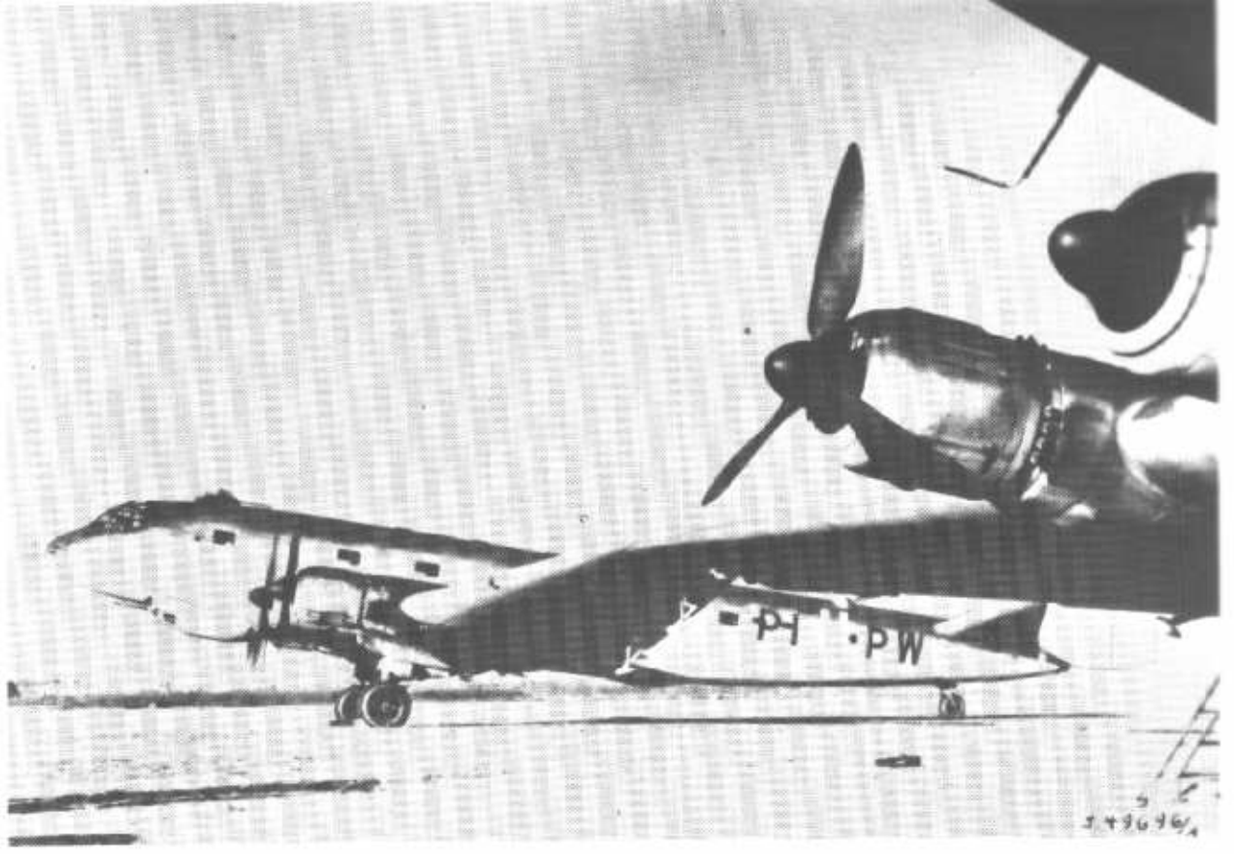


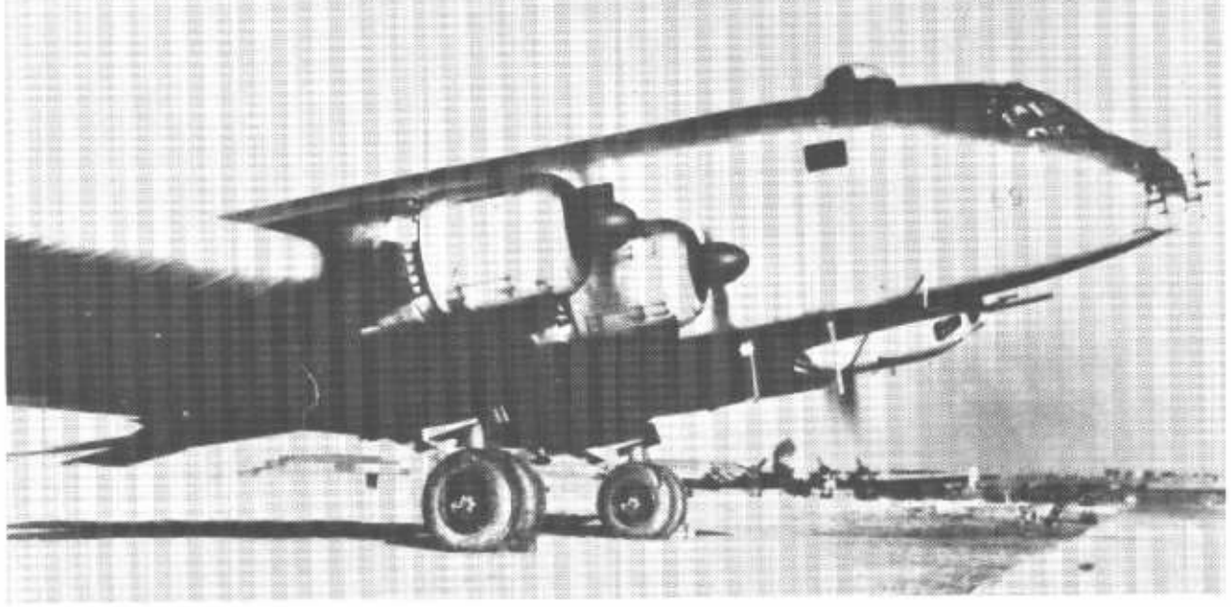


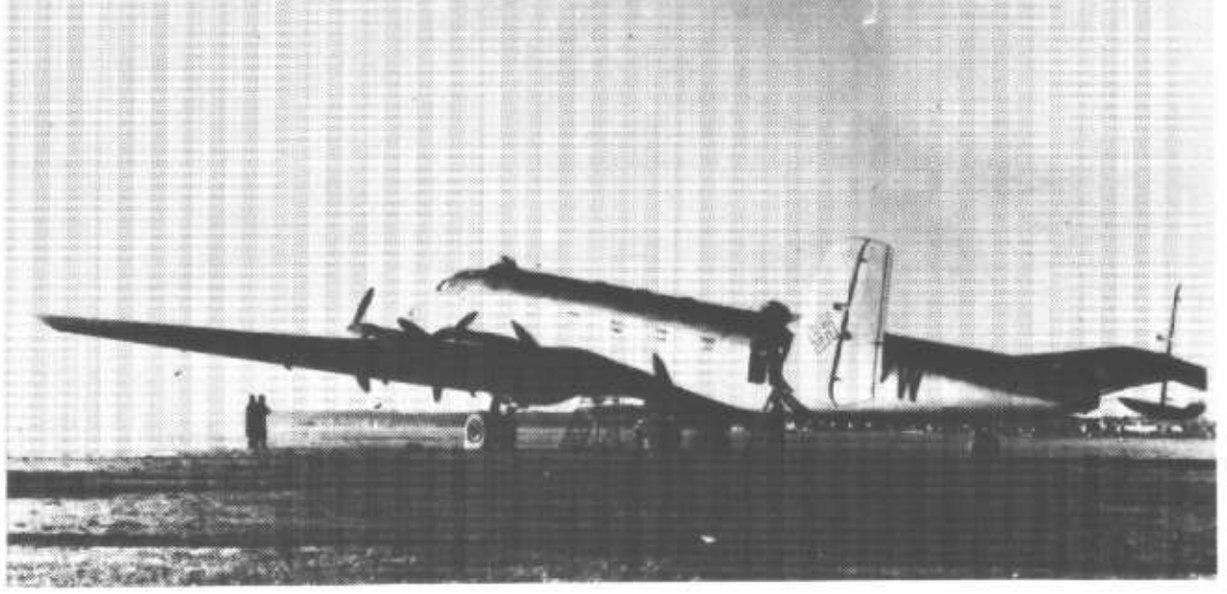








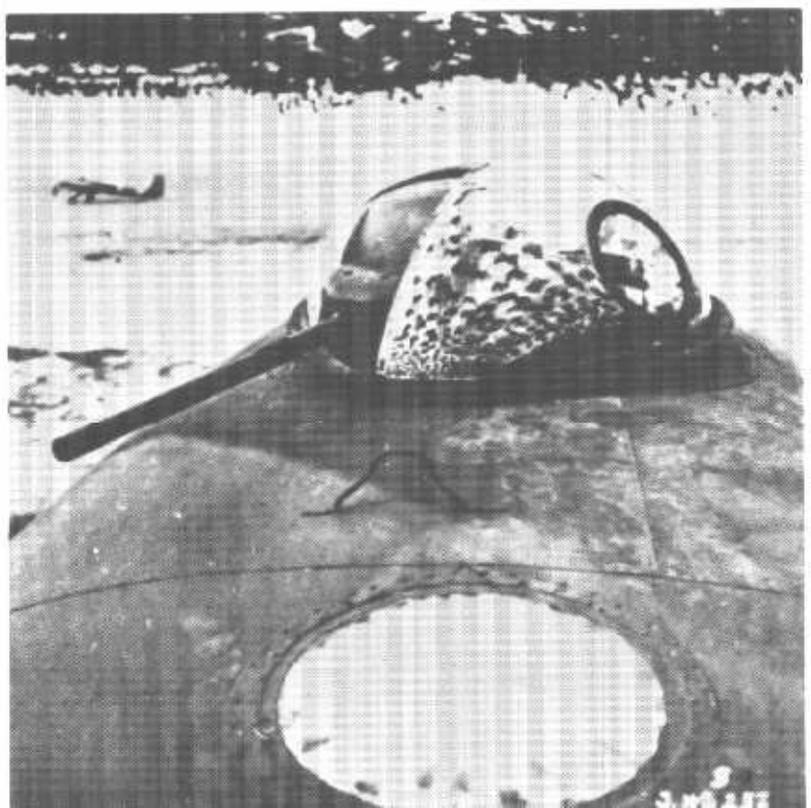


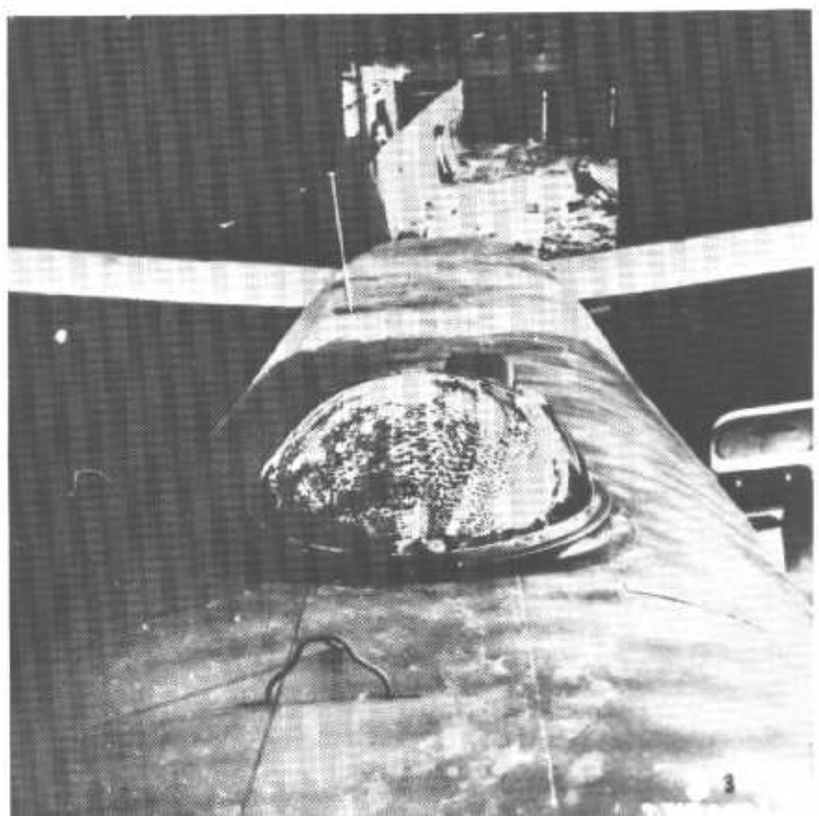


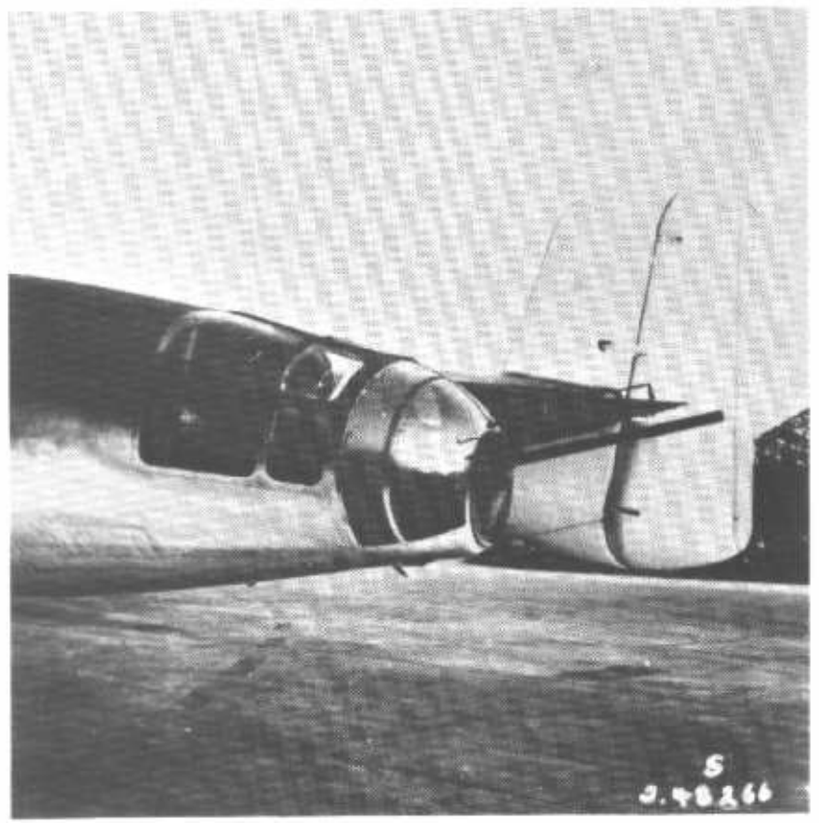
Another maritime reconnaissance variant, the **Ju 290 A-4** appeared in autumn 1943 and was identical to the previous models apart from the addition of a low drag Focke-Wulf FW 19 turret in the forward dorsal position. The aft dorsal turret remained the FW 20 type. Additionally, in the first A-4 some modification to the under nose gondola was also carried out. Ju 290 A-4; W. Nr. 0165; was rebuilt in the autumn of 1943 as a test aircraft and was located subsequently at Peenemünde. Trial flights amounting to 50 hours were conducted, whereupon it was used for supply and transportation and was flown a total of 130 hours. Although it was intended to fit an autopilot to this aircraft, this had not been completed by 1945.

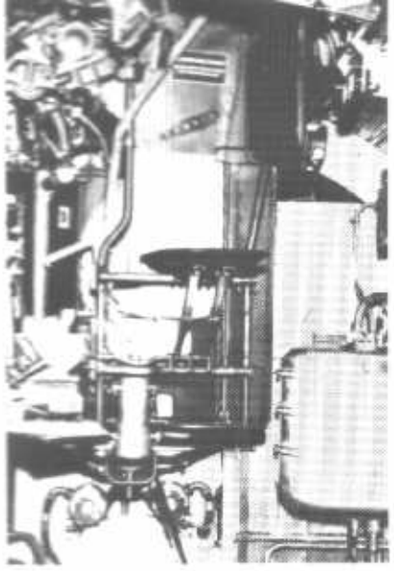
Top: All twelve close-up photos detail various features of the Ju 290 A-4 series including (l. to r.) top gunner's position (B1), side-mounted 13 mm machine gun, main fuselage doors, seating, gondola gun positions and views of the ETC bomb racks. Lower photo illustrates the first production Ju 290 A-5; W. Nr. 0170; KR+LA.

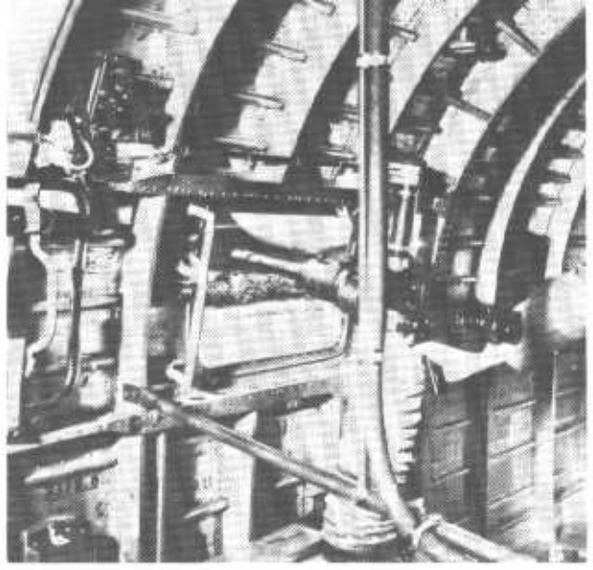
All photographs on this page are of the Ju 290 A-4 series. Top left: Ju 290 A-4; W. Nr. 0165, 0166 and 0167 under construction. Top right: The fifth and last example of this series, W. Nr. 0169. Above: Two additional views of W. Nr. 0169. Below: Reflecting the overhead camouflage net in the plexiglass are the two dorsal turrets B1 (left), B2 (middle) and the tail station, H-stand.

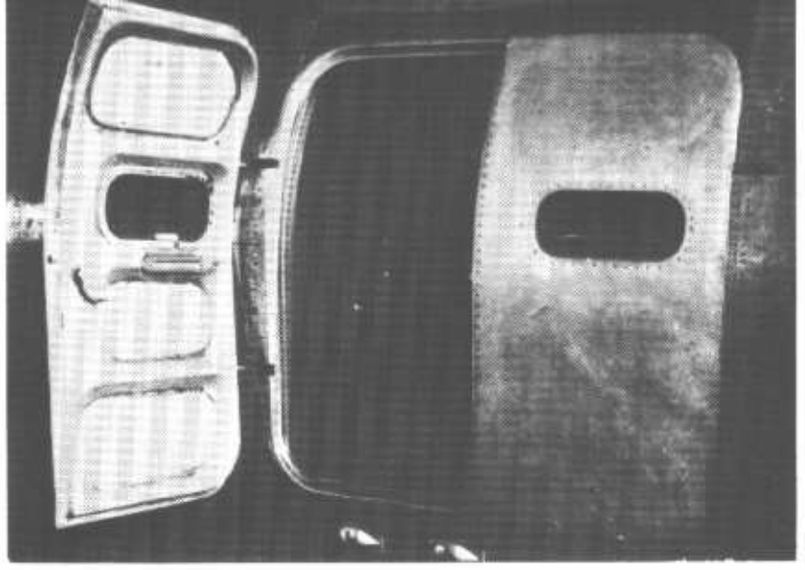


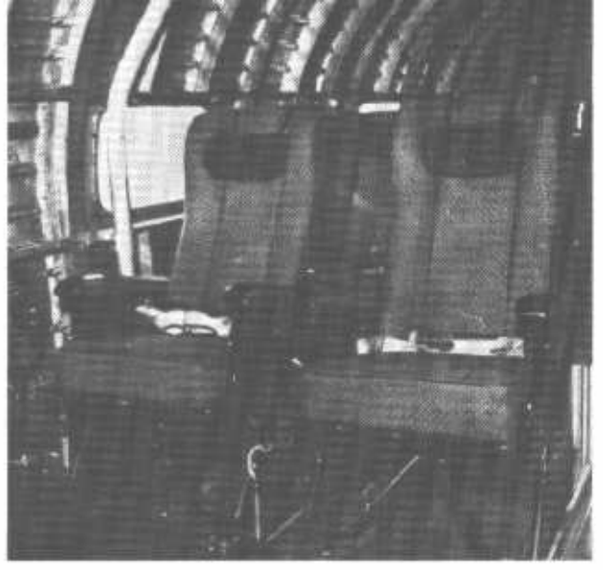


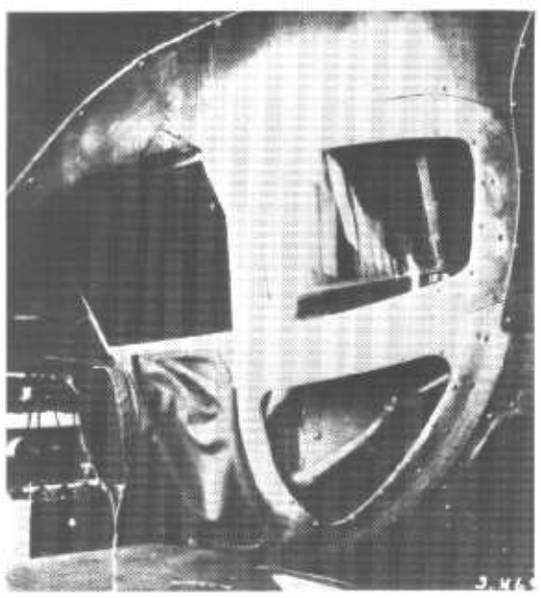


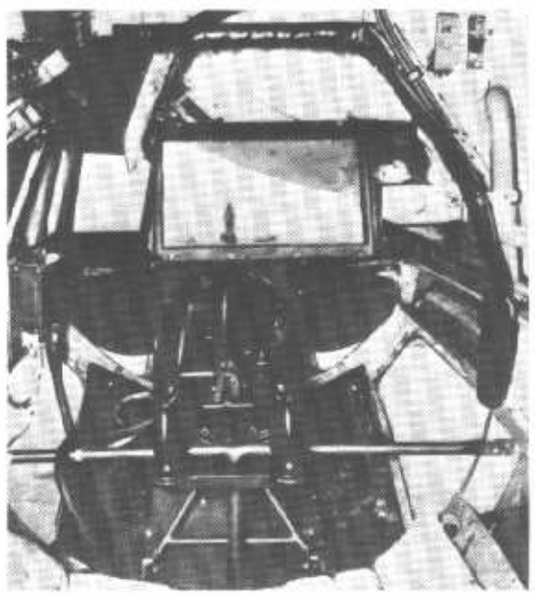


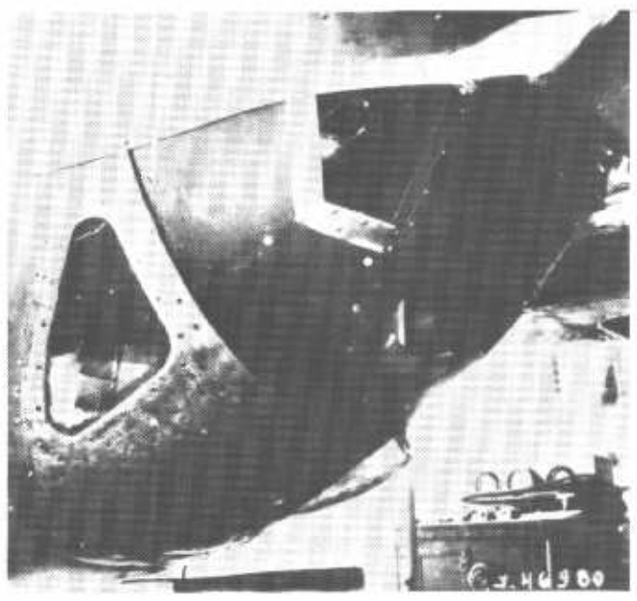


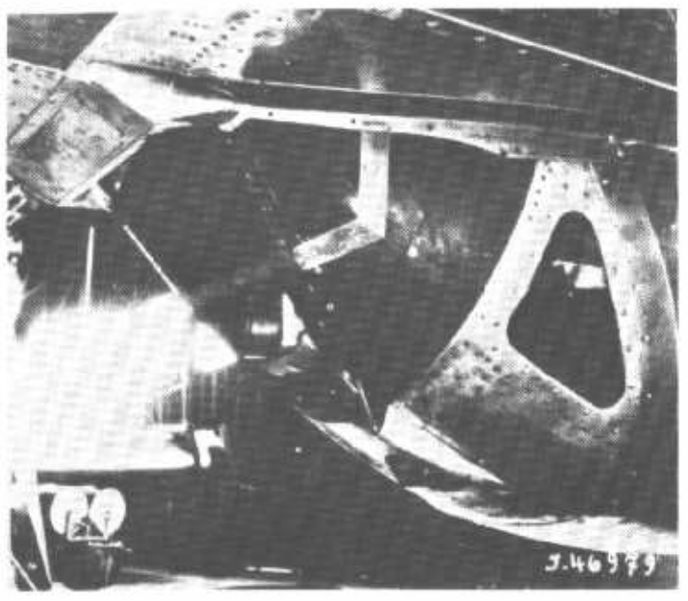


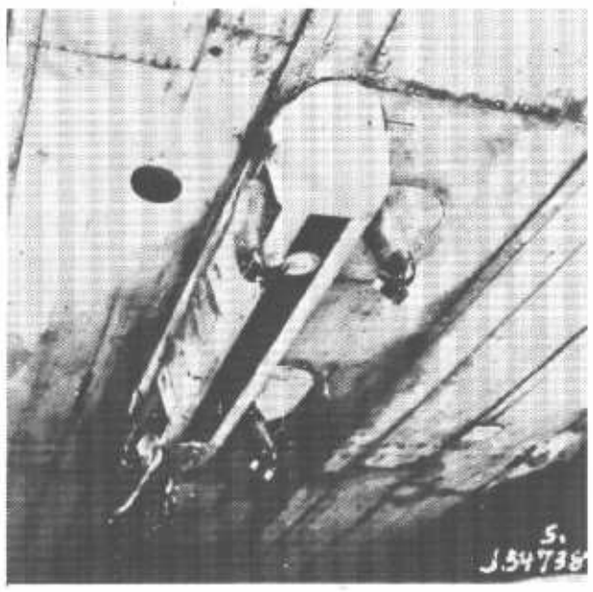


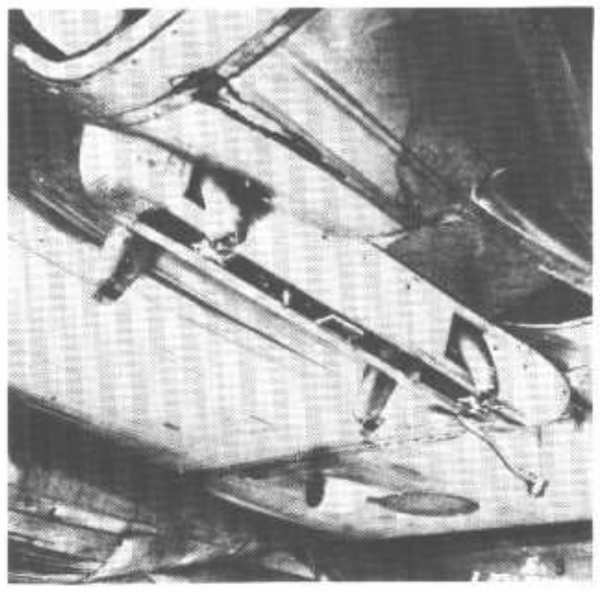




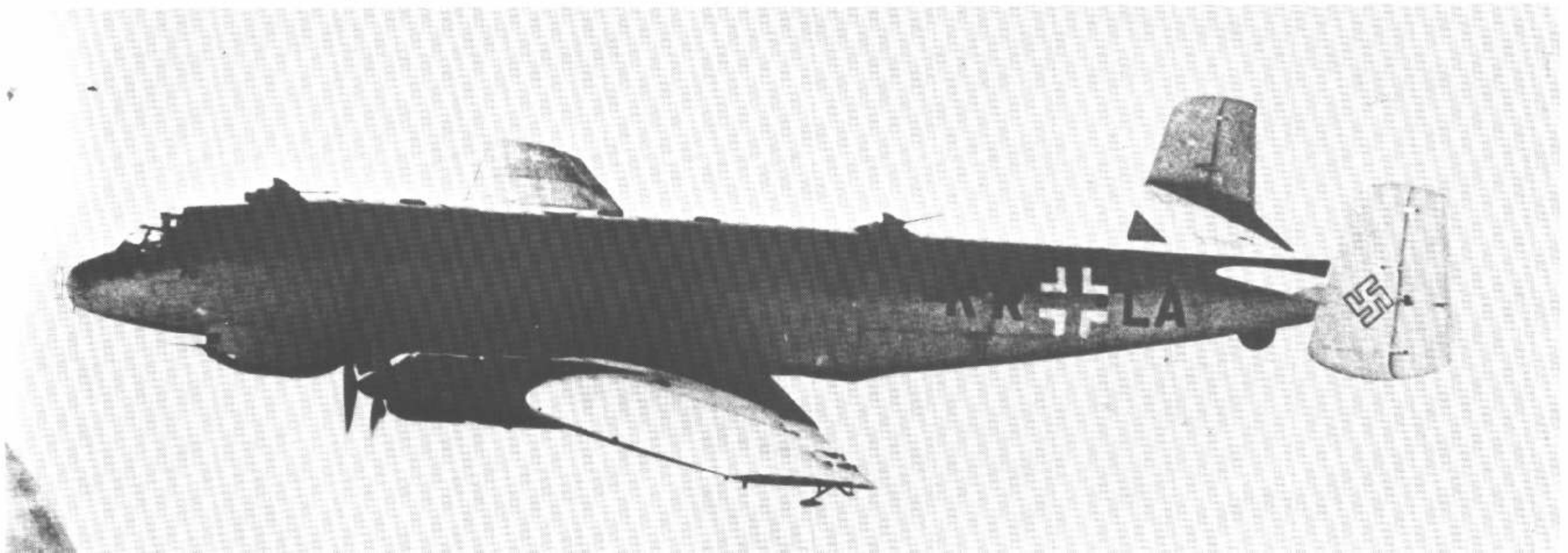


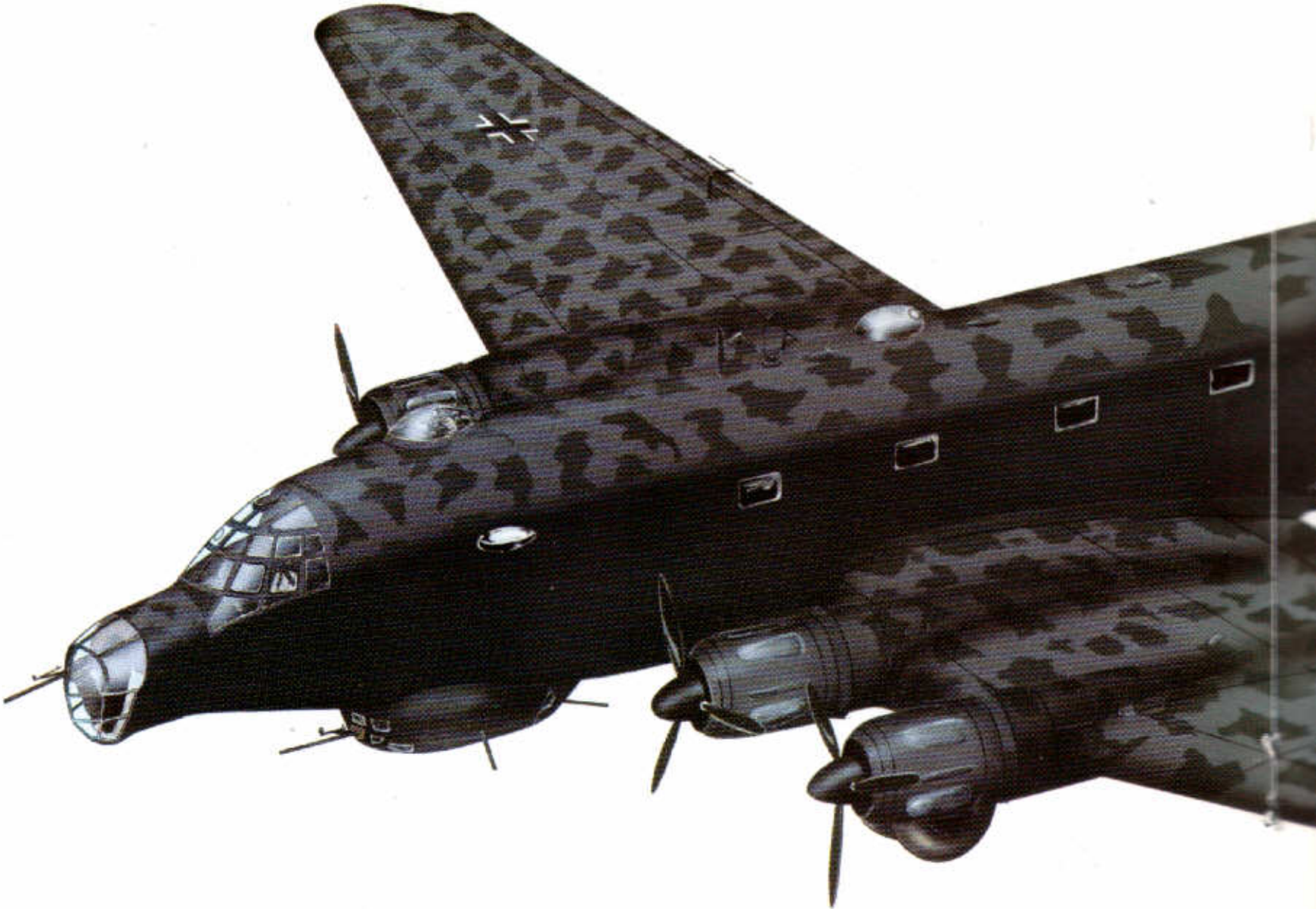


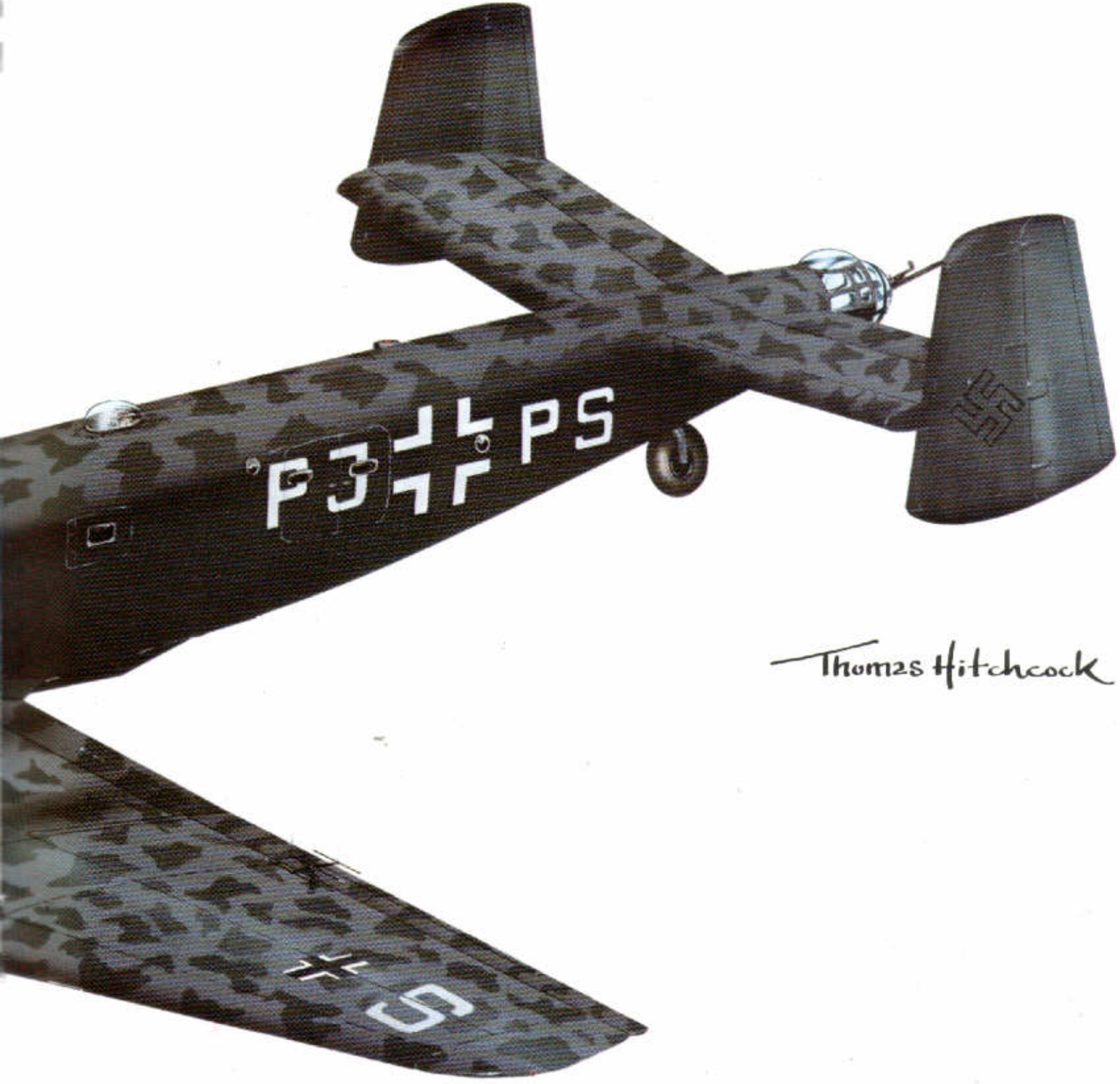


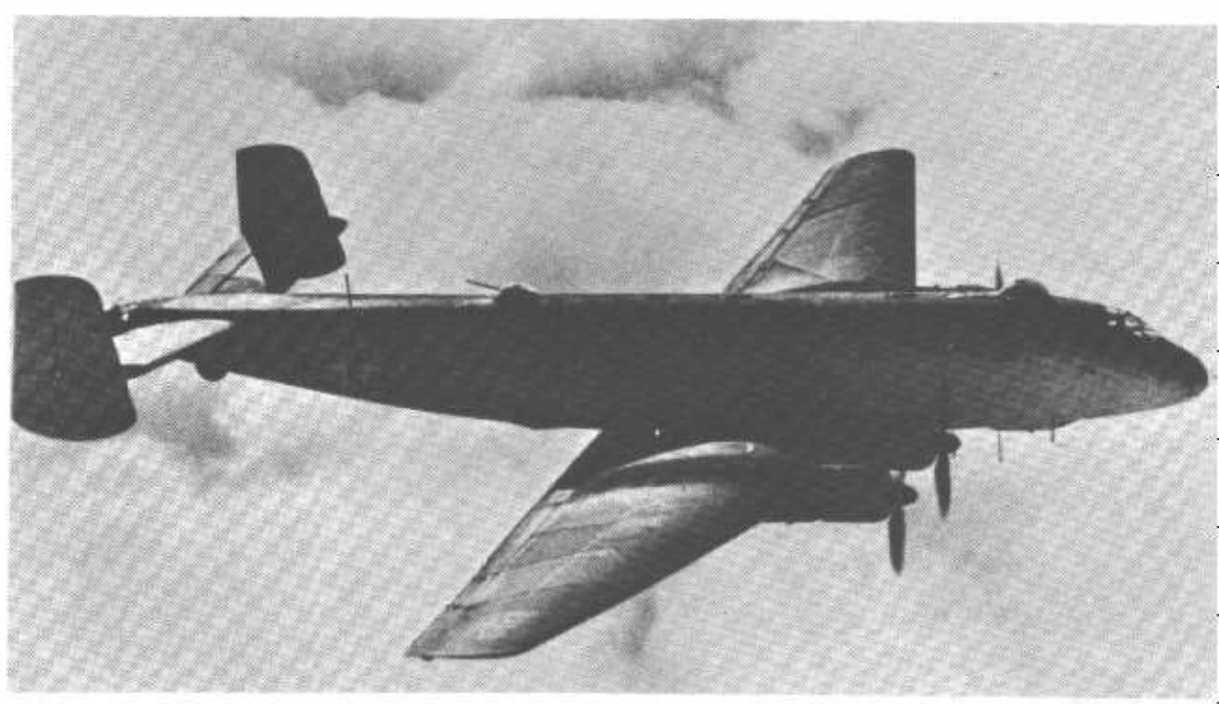


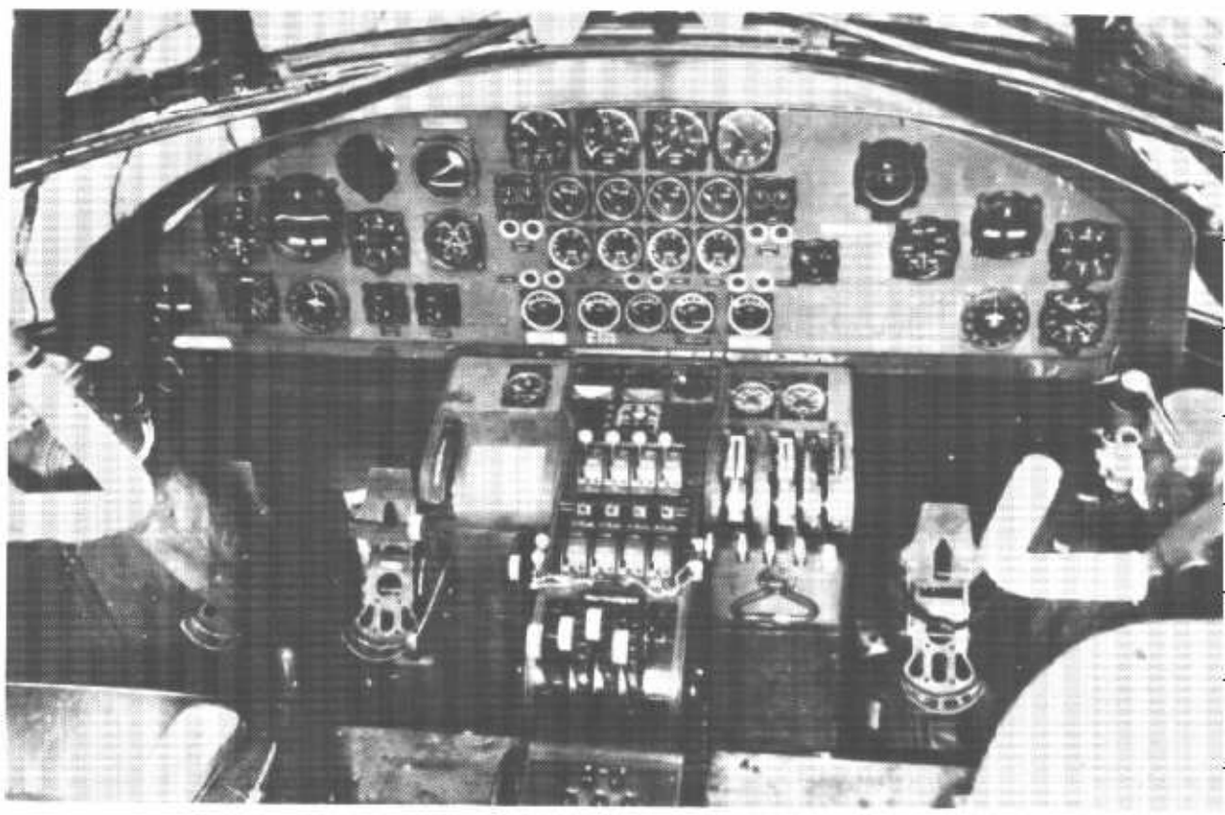
The **Ju 290 A-5** series began to leave the assembly line in November 1943 with total production amounting to eleven aircraft. This maritime reconnaissance model was similar to previous models apart from improved protection for both fuel tanks and pilots. Additionally an emergency fuel jettison system was installed as an added safety measure. Beginning with the last A-5, W. Nr. 0180, the aft beam gun positions carried two MG 151/20 cannon in lieu of the smaller MG 131's. Airstream spoilers also were mounted for these gun stations which deflected the windblast from the weapons. Two additional crew members were carried and the type was routinely fitted with FuG 200 "Hohentwiel" search radar. Later in March 1944 the first production A-5, W. Nr. 0170, was fitted with four BMW 801 TL engines by BMW as part of a search for more powerful engines for the 290.

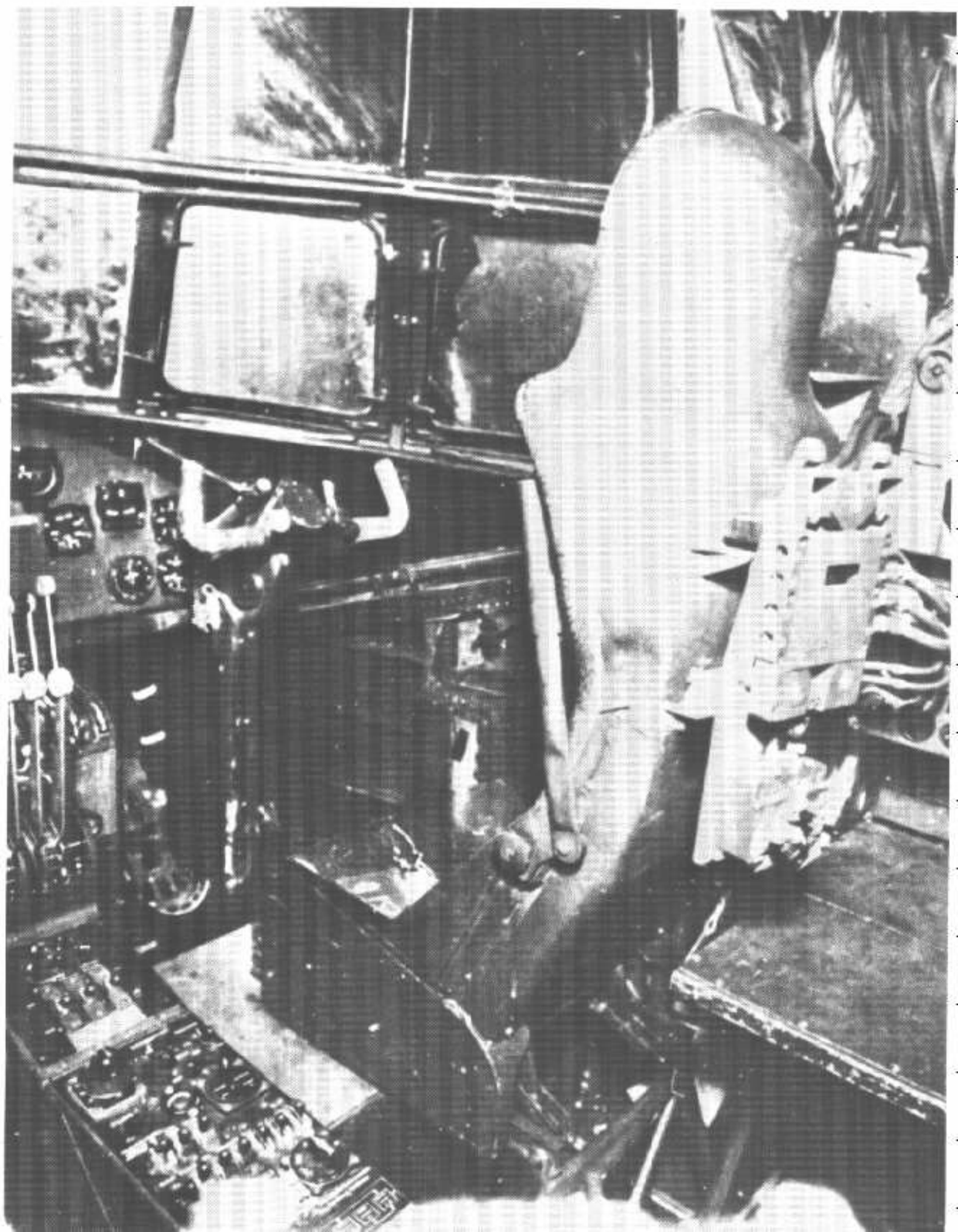




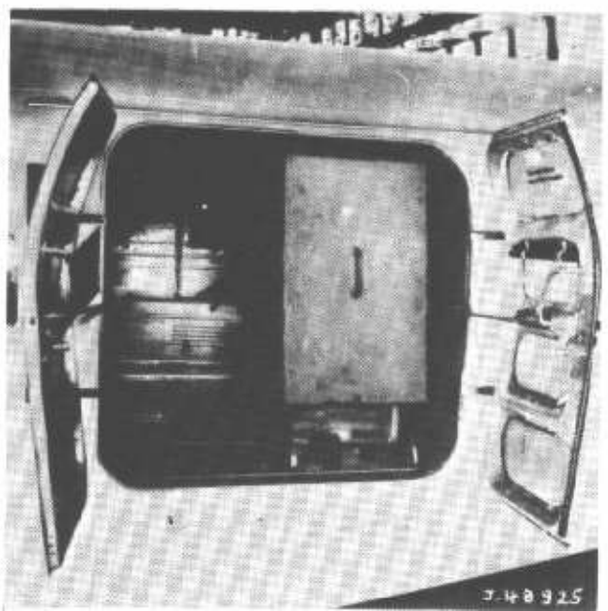

Thomas Hitchcock

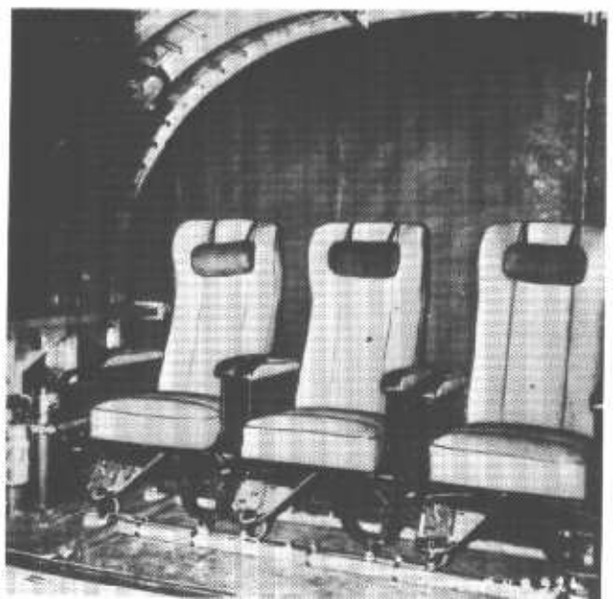






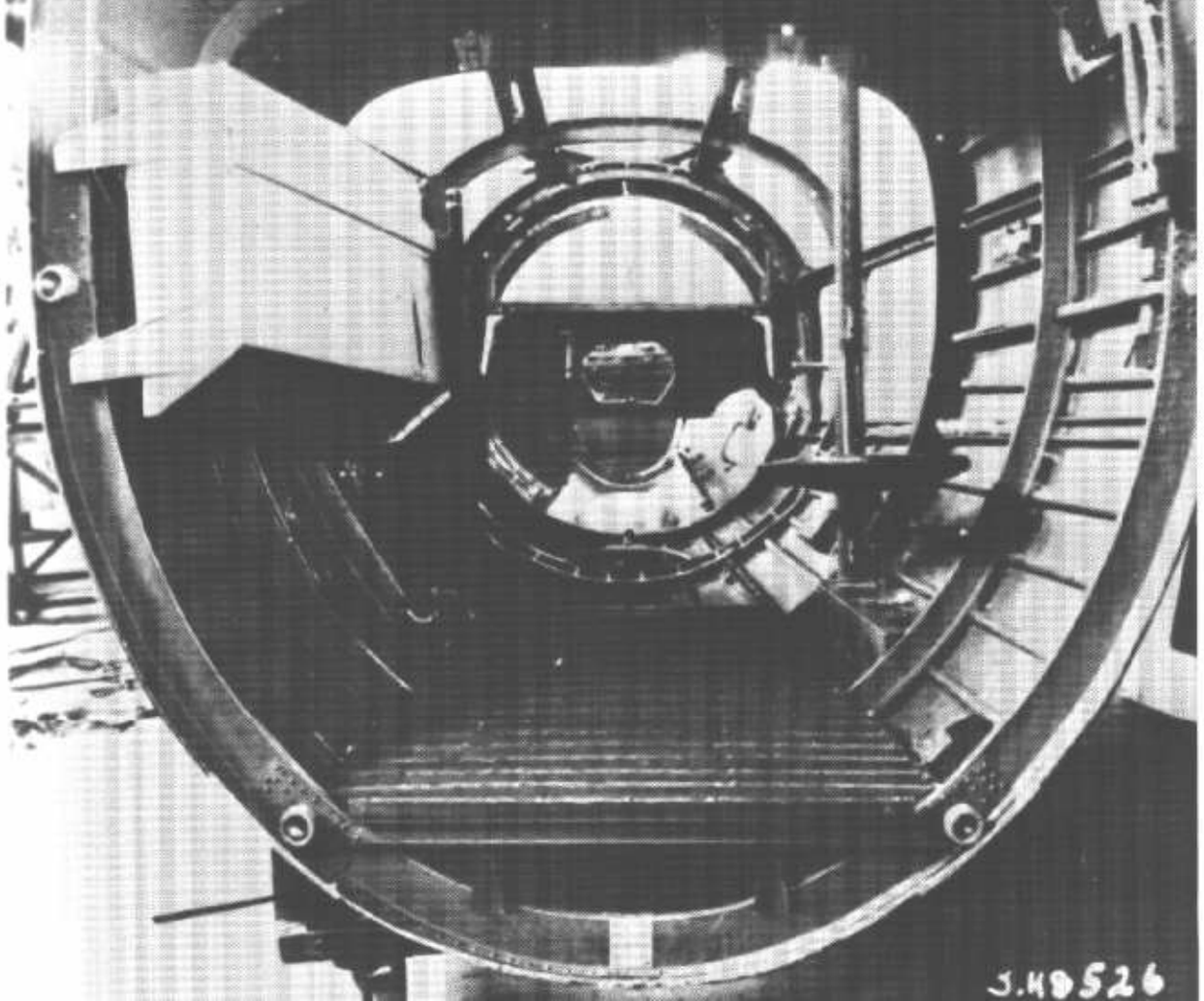
Above: Three views of the first Ju 290 A-5; W. Nr. 0170; KR+LA together with an overall view of the instrument panel. Right: Copilot's armored seat is well depicted here. Two side windows for the copilot could be opened and a similar set was provided for the pilot on the left side. Below: Container for the rubber dinghy is visible through the open fuselage doors.

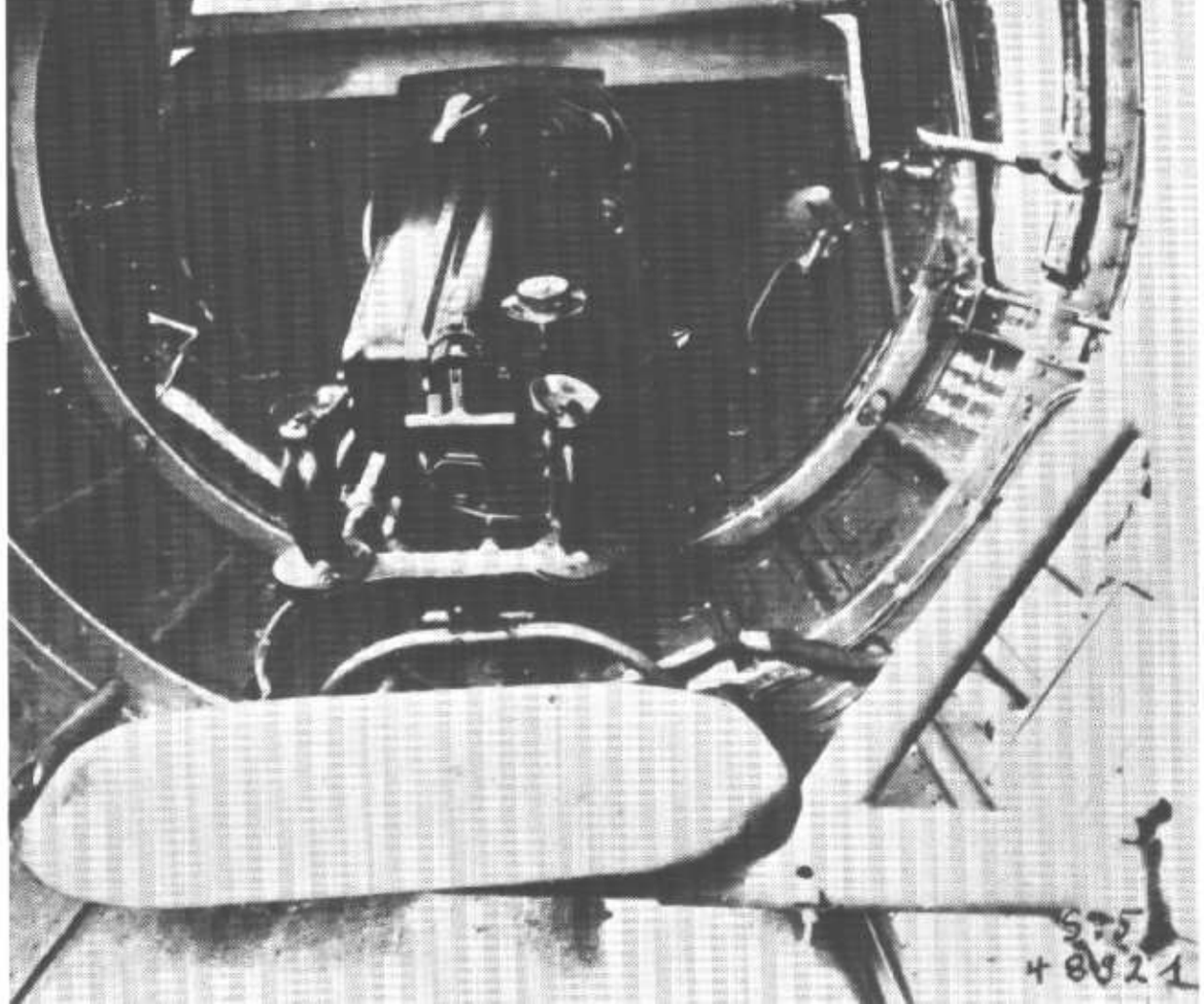


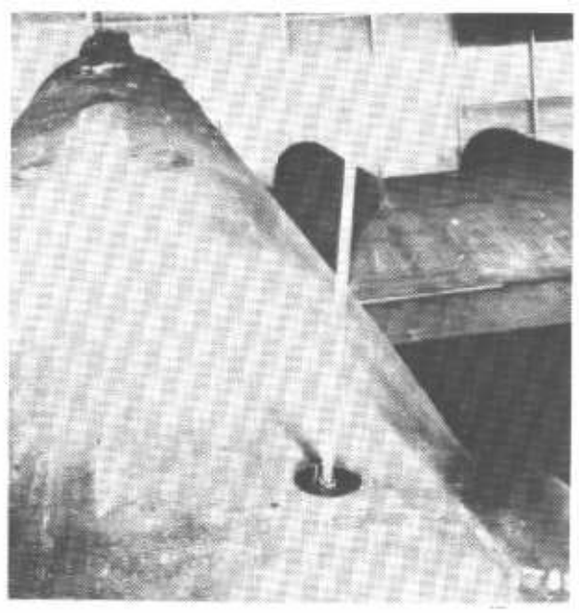


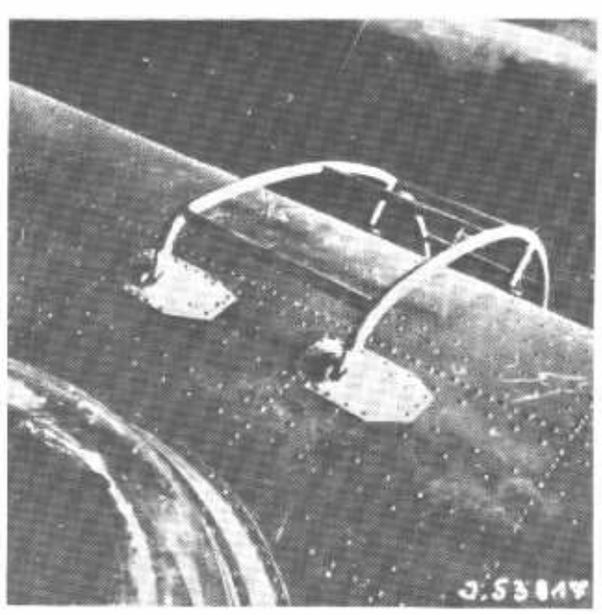
Above: Striking underside view of Ju 290 A-5; W. Nr. 0170, reveals features not normally seen.

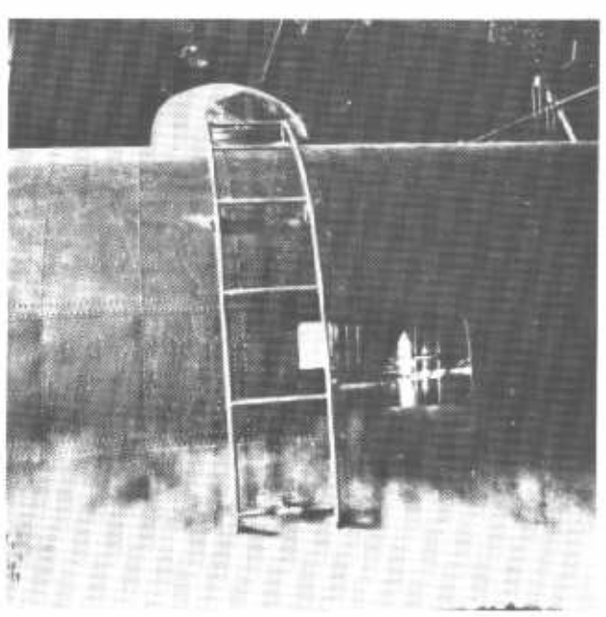
Below: Two views of the tail gunner's position on W. Nr. 0170. Note ammunition box on the left fuselage wall in the left photo. Right photo depicts the twin grips of the MG 151 20 mm cannon.

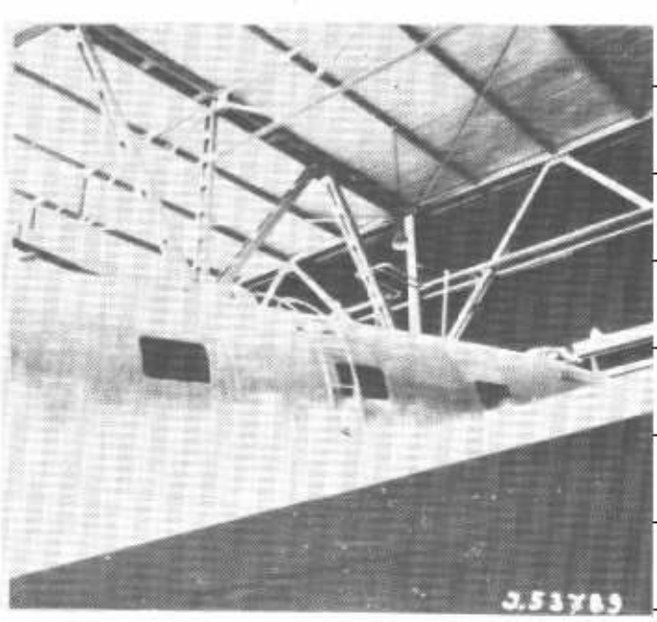


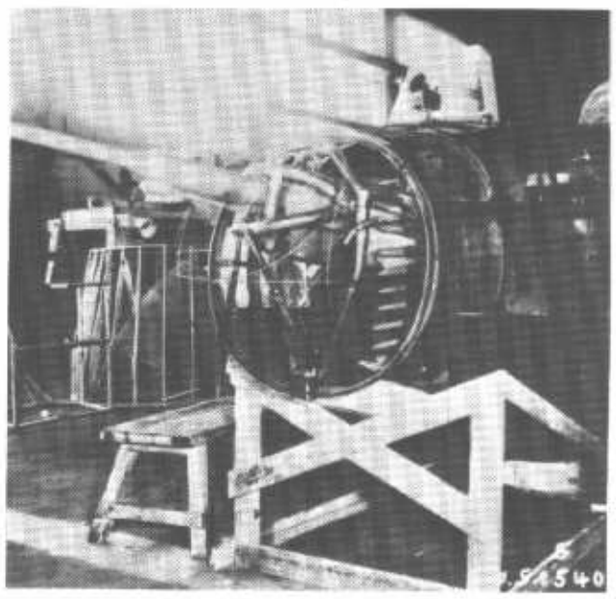


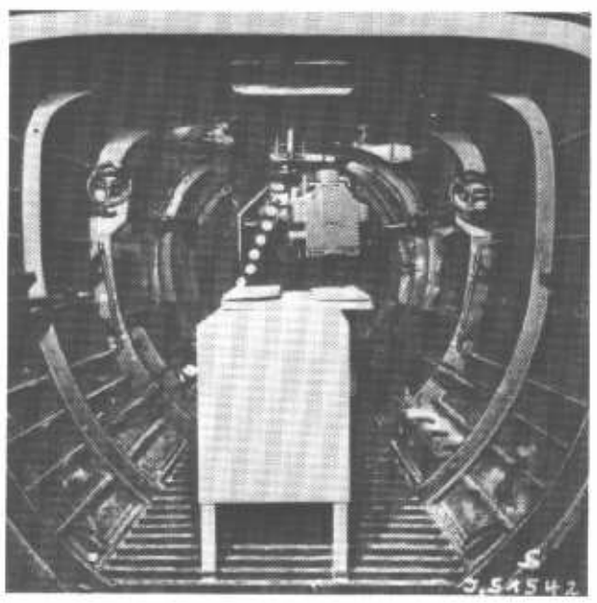


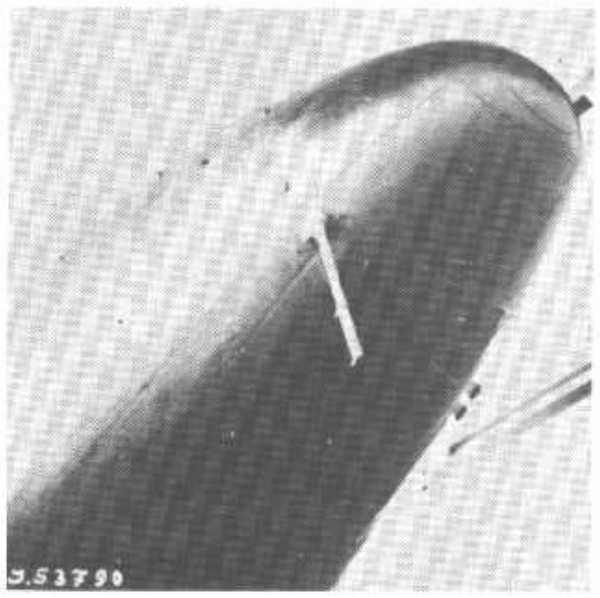






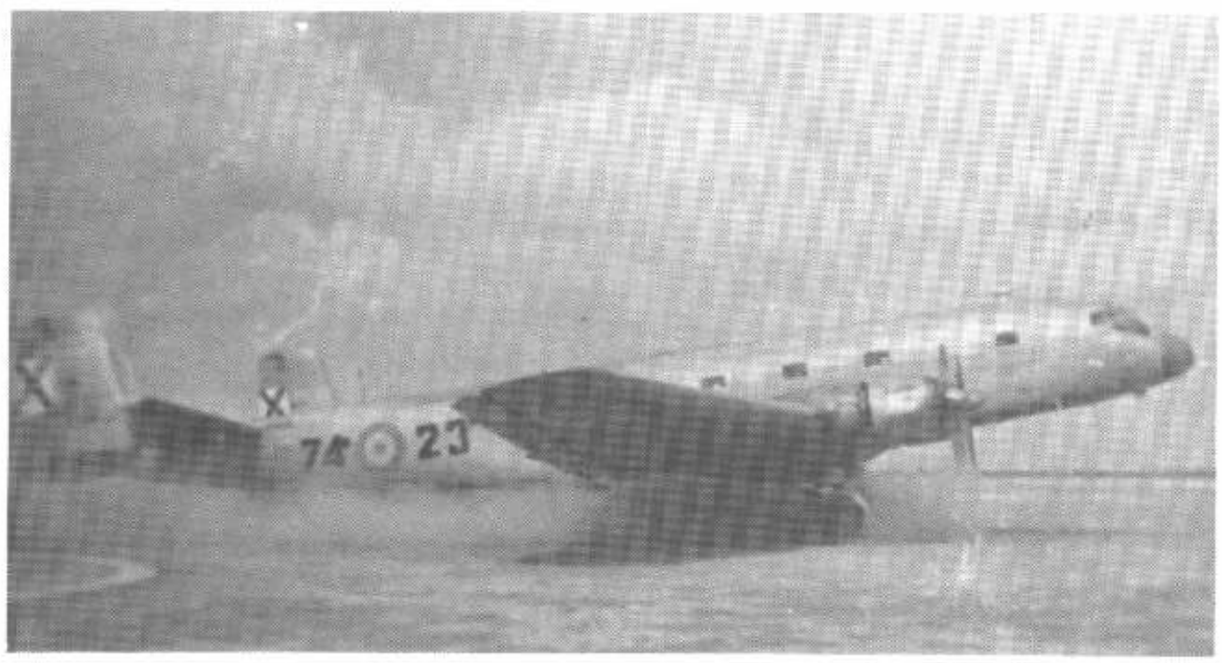


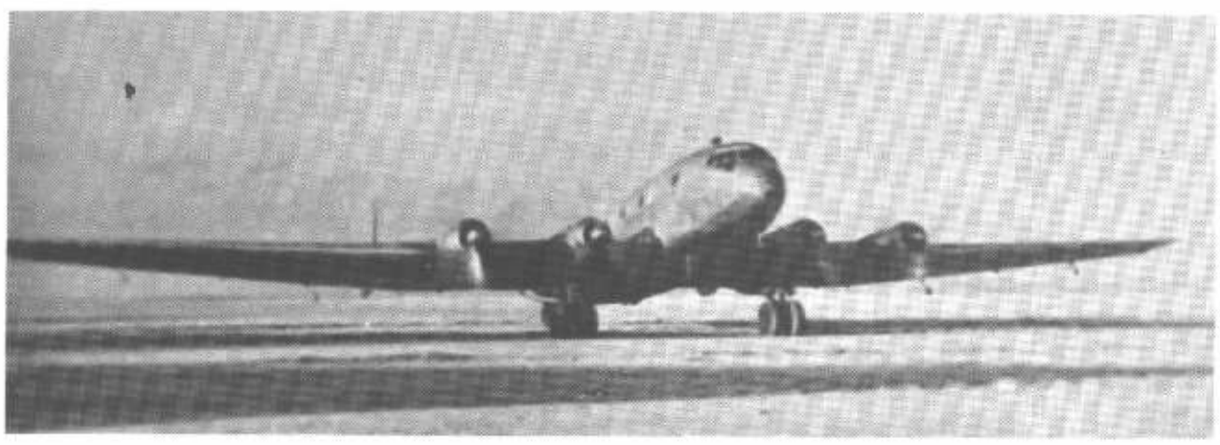


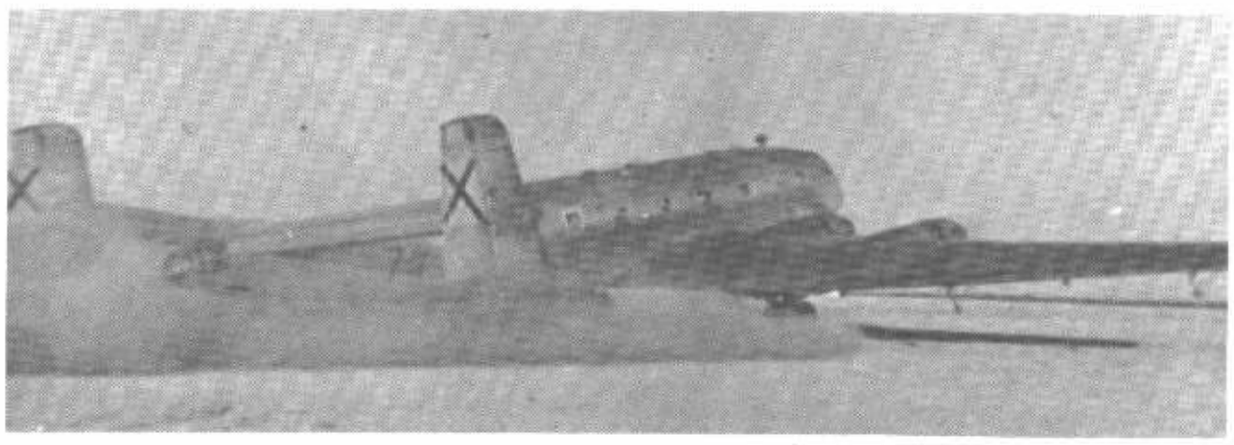


All photos on this page depict the sole Ju 290 A-6. Close-ups above and left point up details including the ditching ladder and MK 103 tail gun. Below: In Spanish service the aircraft was used by the Advanced Flight School at Salamanca-Matacan well into the 1950's.

The **Ju 290 A-6** series production amounted to only one aircraft which initially was allotted to special transport duties, i.e., Adolf Hitler's personal aircraft. Cabin pressurization was investigated but abandoned when numerous sealing problems were encountered. By this time Hitler had all but forsaken air travel for which he was never very enthusiastic, and thus the aircraft finally was completed as a 50-seat, long-range passenger transport in January 1942. This model had the distinction of being the last flyable 290, ending its career in Spain in the 1950's.







Intended as a long-range reconnaissance bomber, the **Ju 290 A-7** appeared in the spring of 1944. A new glazed nose was added which housed another MG 151/20 cannon. Offensive loads could be carried by ETC racks beneath the fuselage and outer wing panels. These racks were designed to carry either a Hs 293, Hs 294 or an X-1, Fritz 1400 controlled trajectory bomb. FuG search radar was carried by most examples but was discarded when overwater operations ceased. Although an original order for twenty-five machines was authorized, only half were completed prior to cancellation of all bomber types in favor of more urgently required fighters.

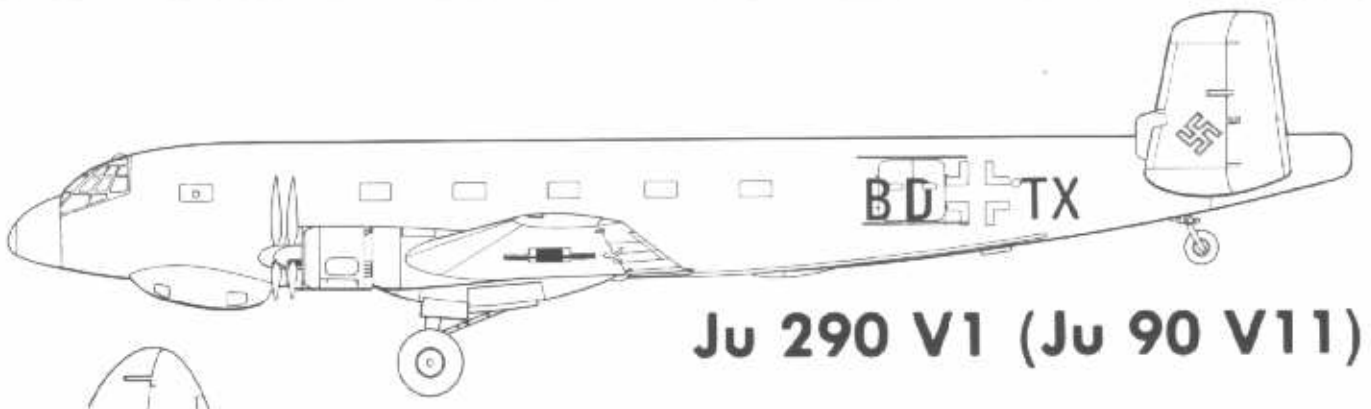
Above: Four views of the Ju 290 A-7; W. Nr. 0181, the first A-7 machine soon after its crash-landing on April 1, 1944. Note prop blades were of the wooden type. By this time either metal or wooden prop blades could have been used. Below: Two views of W. Nr. 0186, the second Ju 290 A-7 taken soon after completion. This aircraft was flown from the RAE to No 6 MU Brize Norton on August 17, 1945. No known Air Ministry number was allotted. Bottom: Two photos of the third Ju 290 A-7; W. Nr. 0187, being serviced prior to delivery.

JUNKERS Ju 290 A-7

Color 65
Light Blue

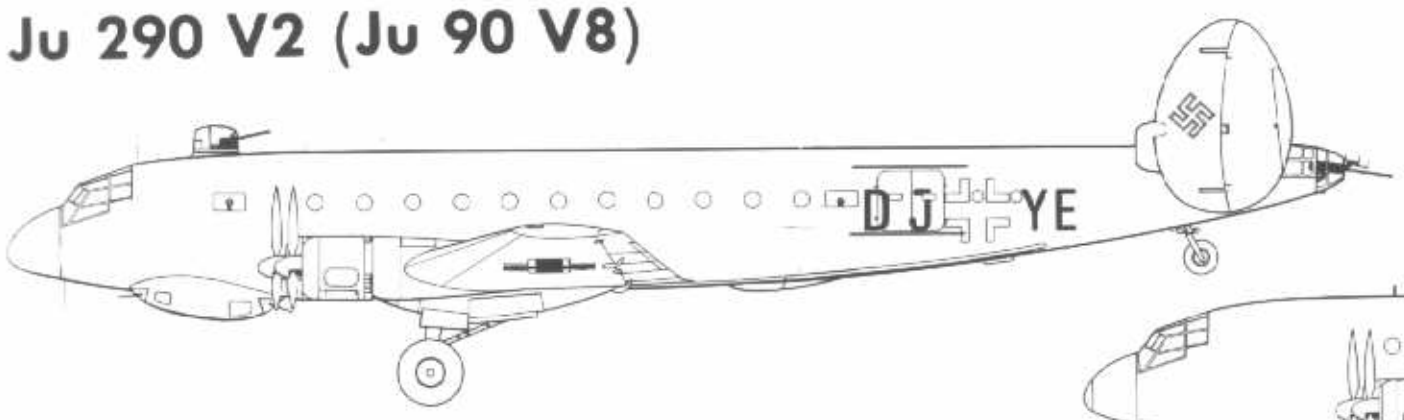
Color 72
Green

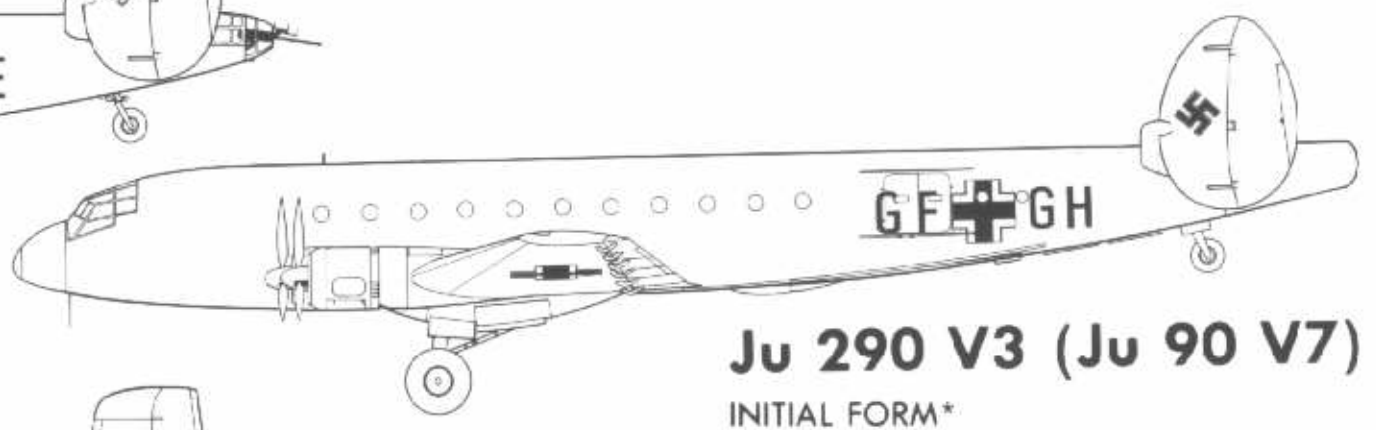
Color 73
Green



Ju 290 V1 (Ju 90 V11)

Ju 290 V2 (Ju 90 V8)

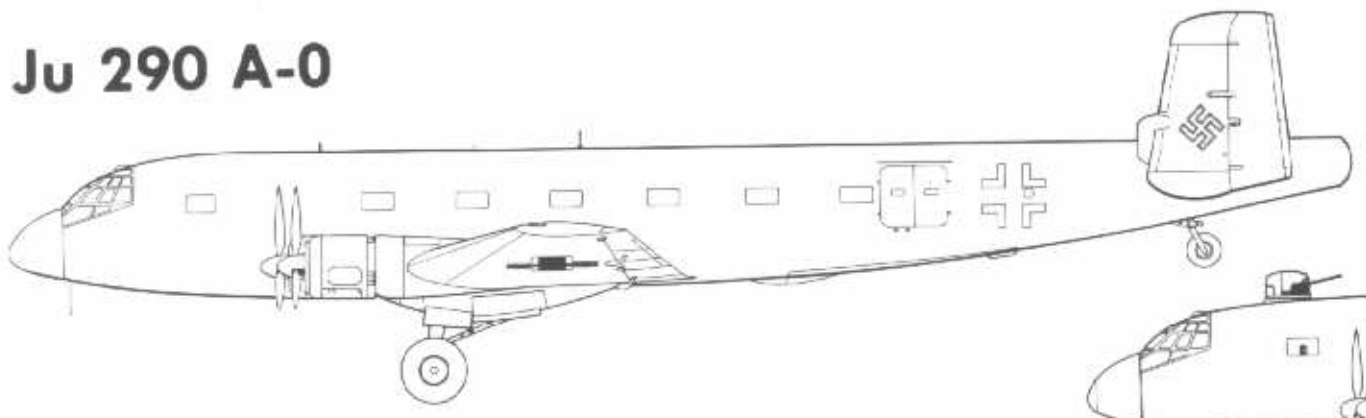


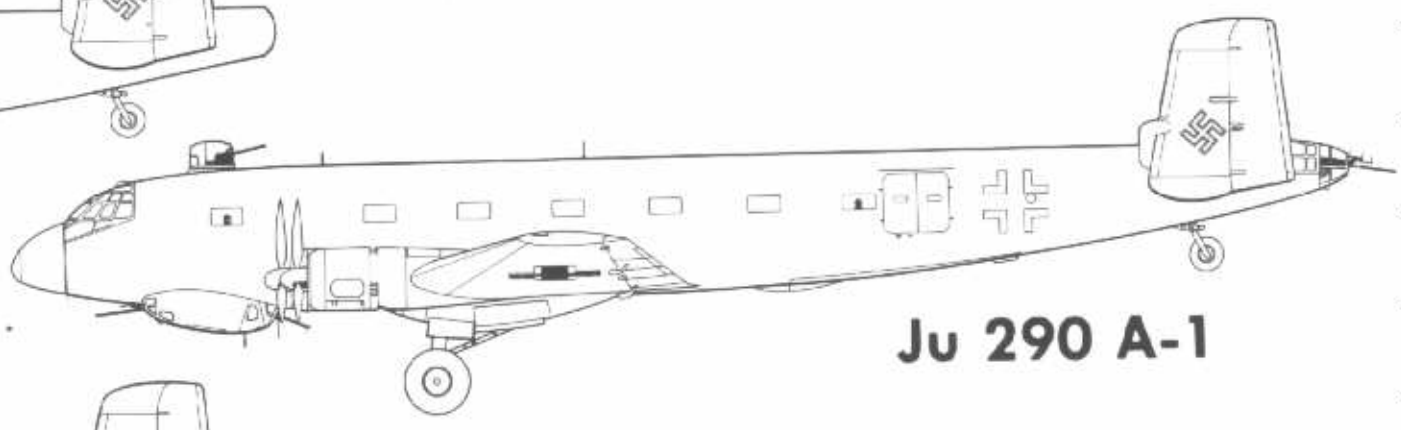


Ju 290 V3 (Ju 90 V7)

INITIAL FORM*

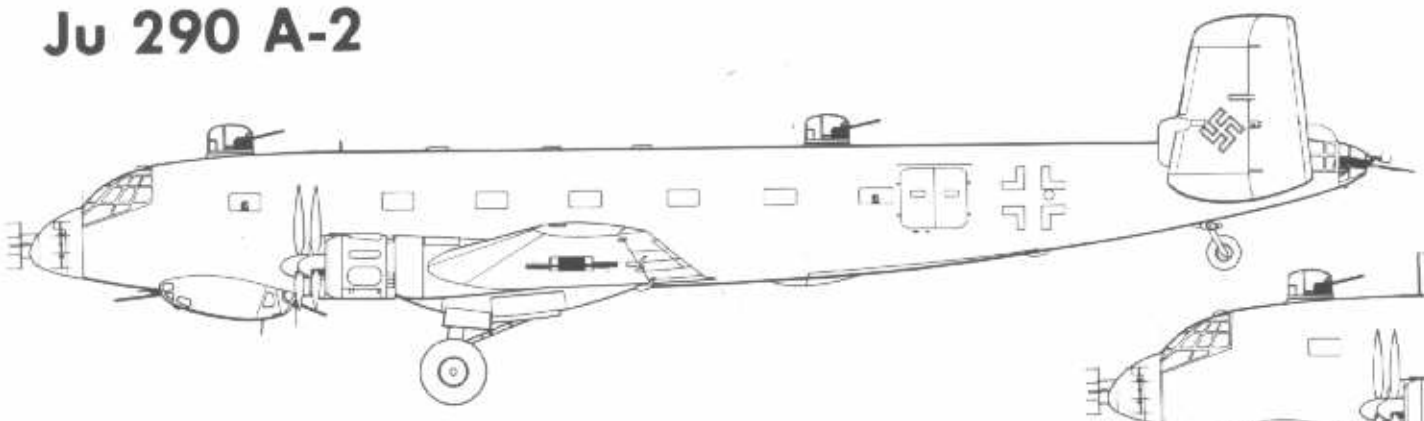
Ju 290 A-0

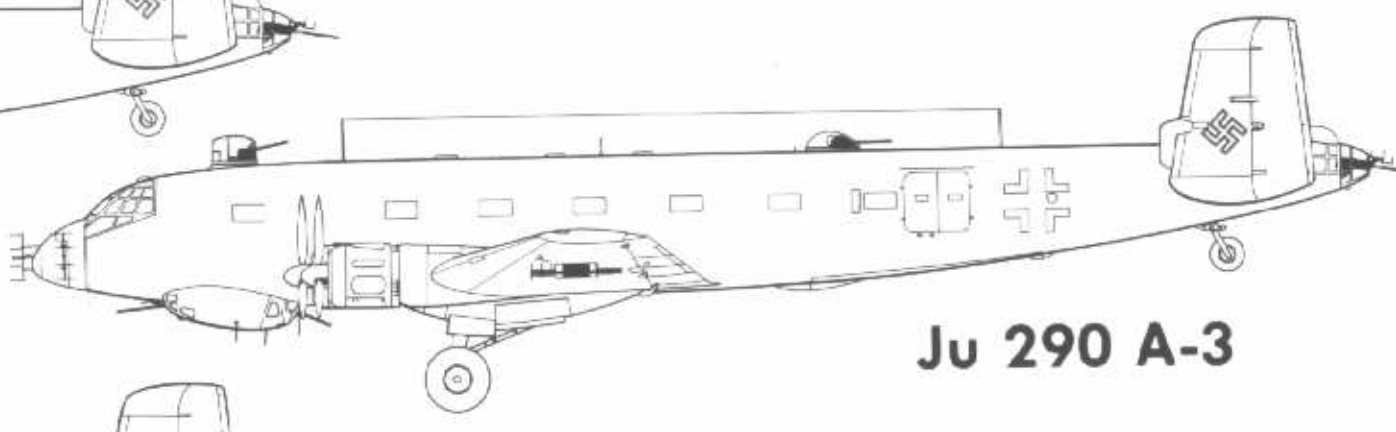




Ju 290 A-1

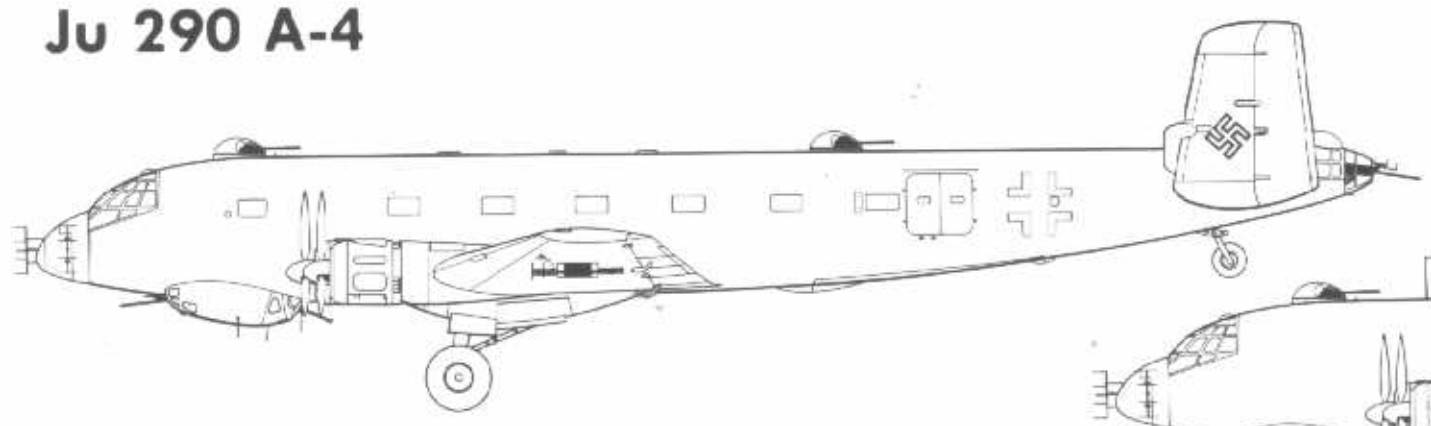
Ju 290 A-2

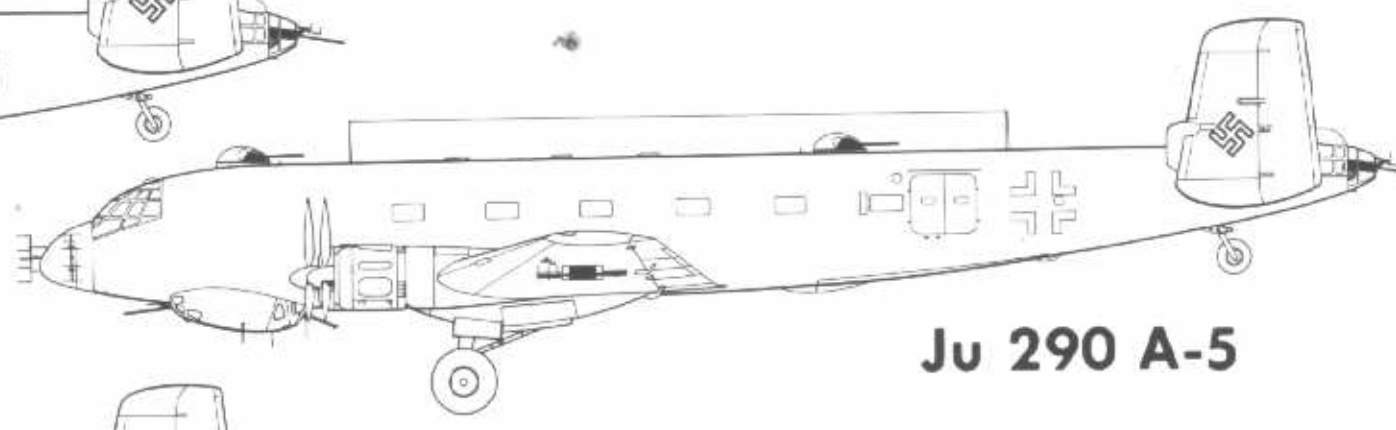




Ju 290 A-3

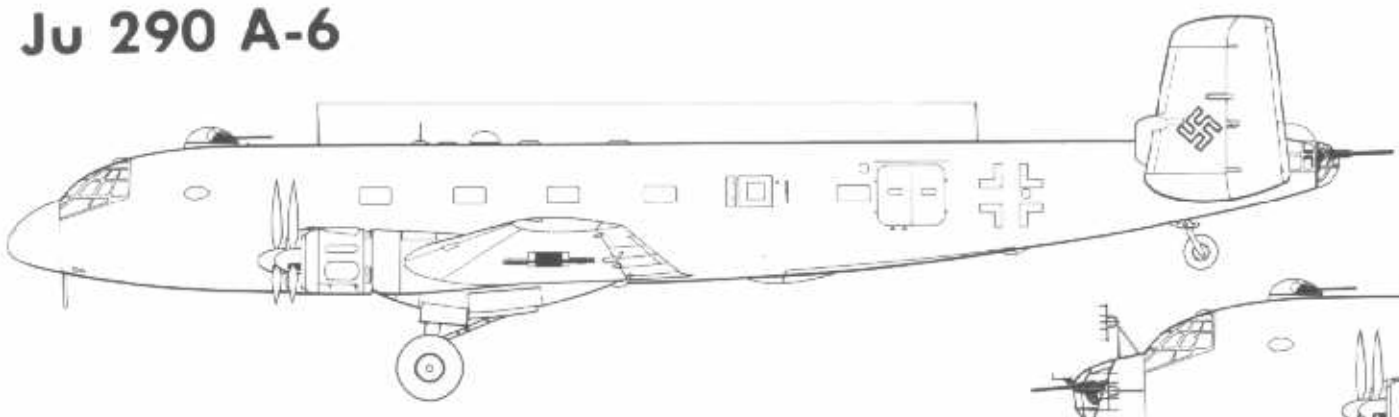
Ju 290 A-4

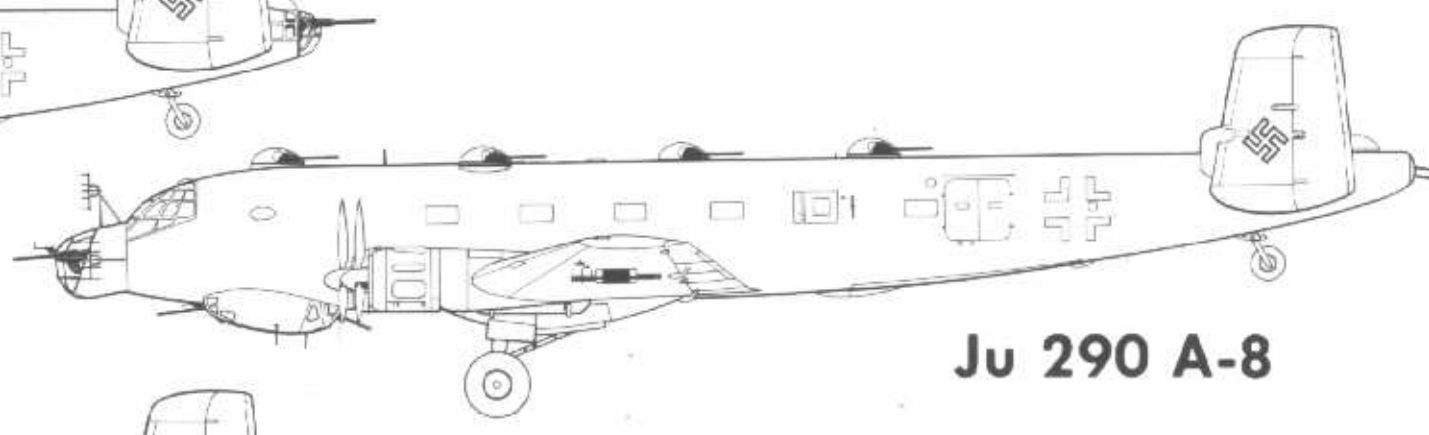




Ju 290 A-5

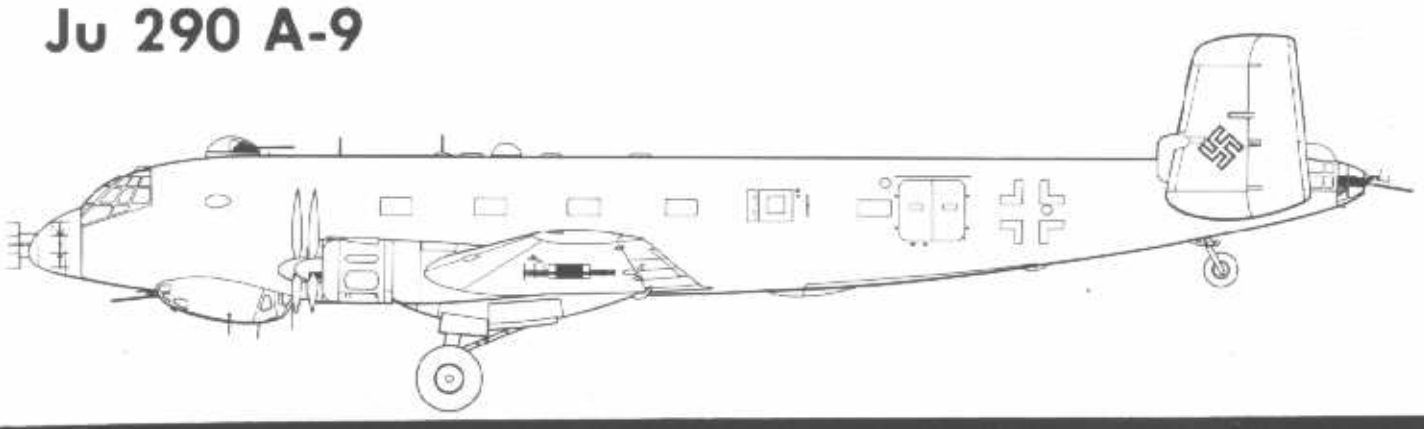
Ju 290 A-6



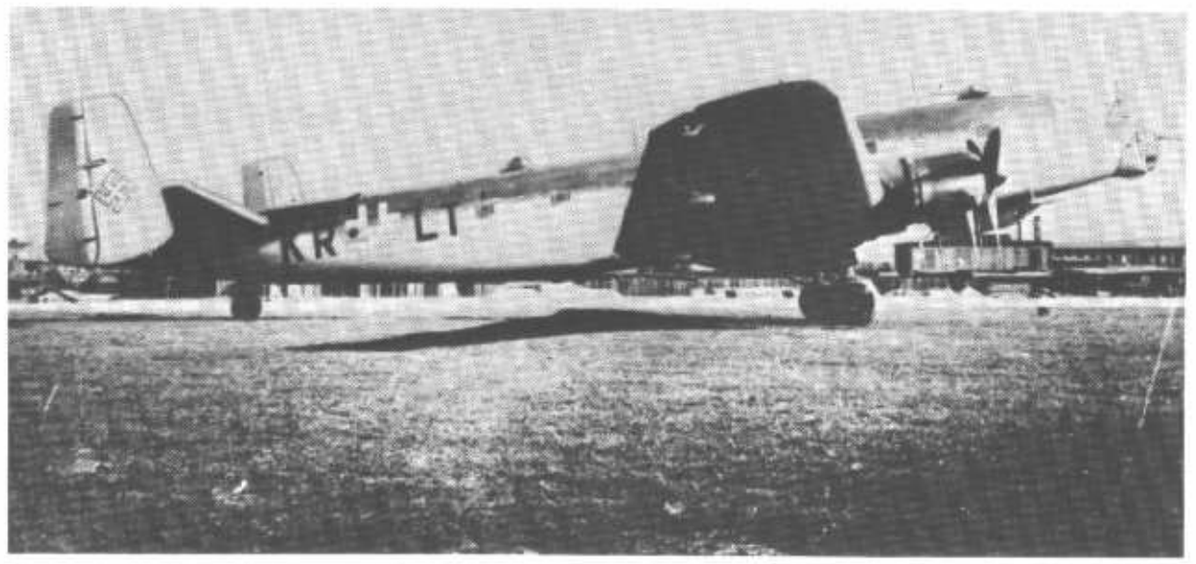


Ju 290 A-8

Ju 290 A-9



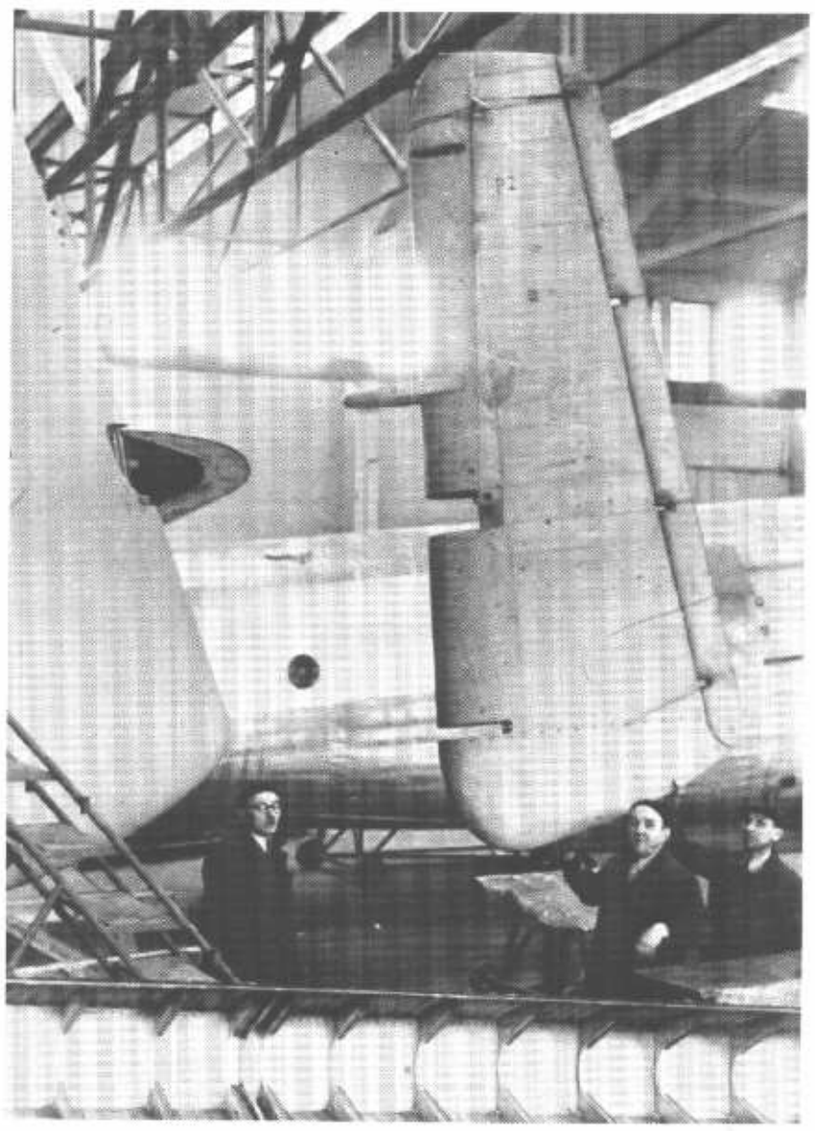
*The Ju 290 V3 later was modified by the addition of gun positions located at the B1, C1, C2, H and beam positions.



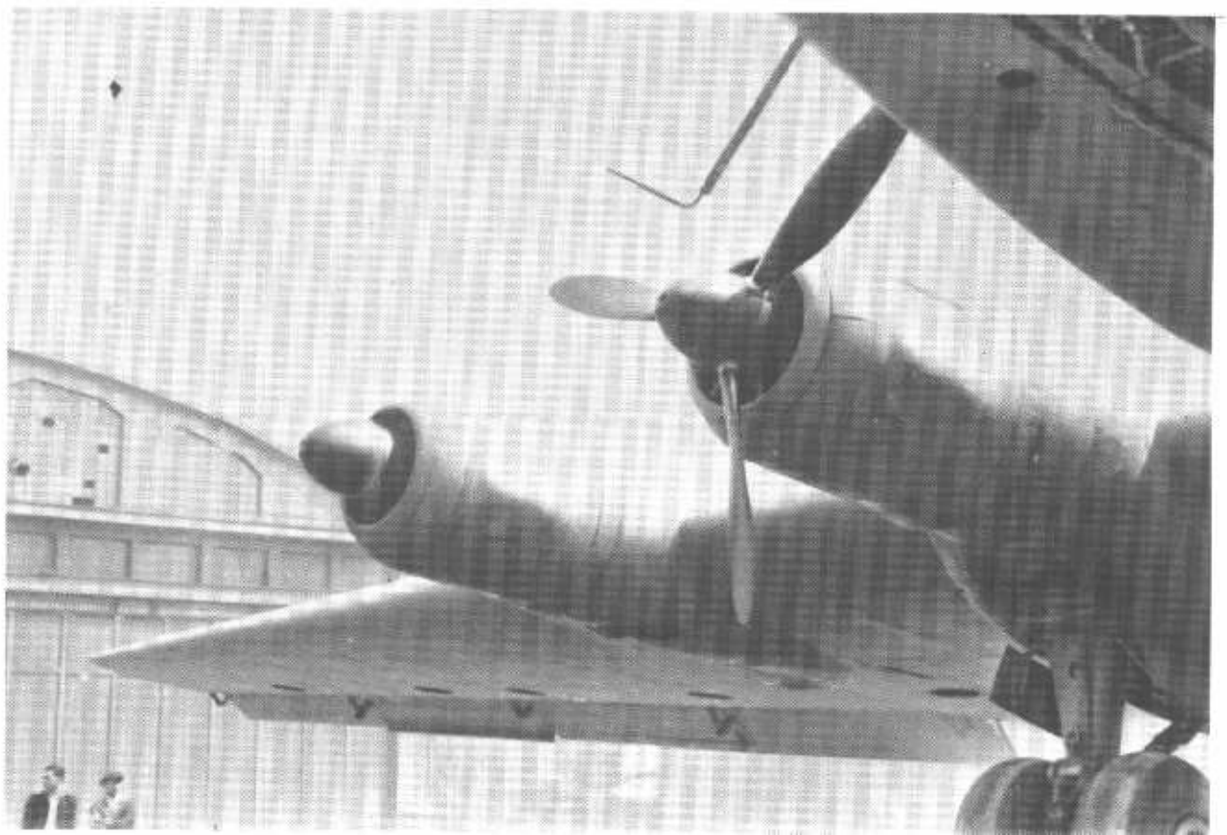
Top: Ju 290 A-7; W. Nr. 0188; KR+LS (left) and Ju 290 A-7; W. Nr. 0189; KR+LT (right).

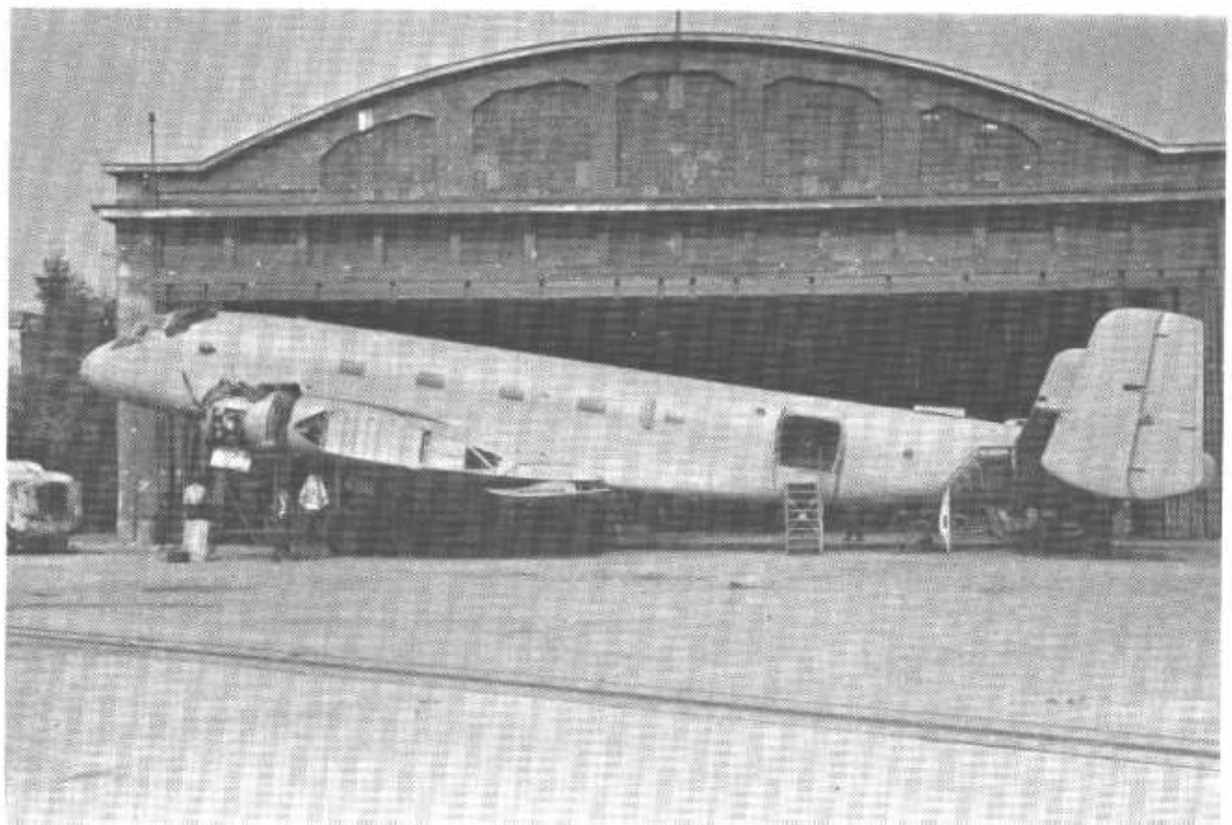
The **Ju 290 A-8** series was to comprise some eleven aircraft, and was just beginning at the Letov plant, when late in 1944 the RLM issued instructions halting all bomber production. Prior to cancellation one Ju 290 A-8 was completed with work on a second example nearly concluded. This version was exceptionally well armed. A total of nine 20 mm cannons was fitted among four dorsal turrets, a nose position, the forward gondola station, fuselage beam positions and the tail station. One 13 mm was fitted to the aft ventral position.

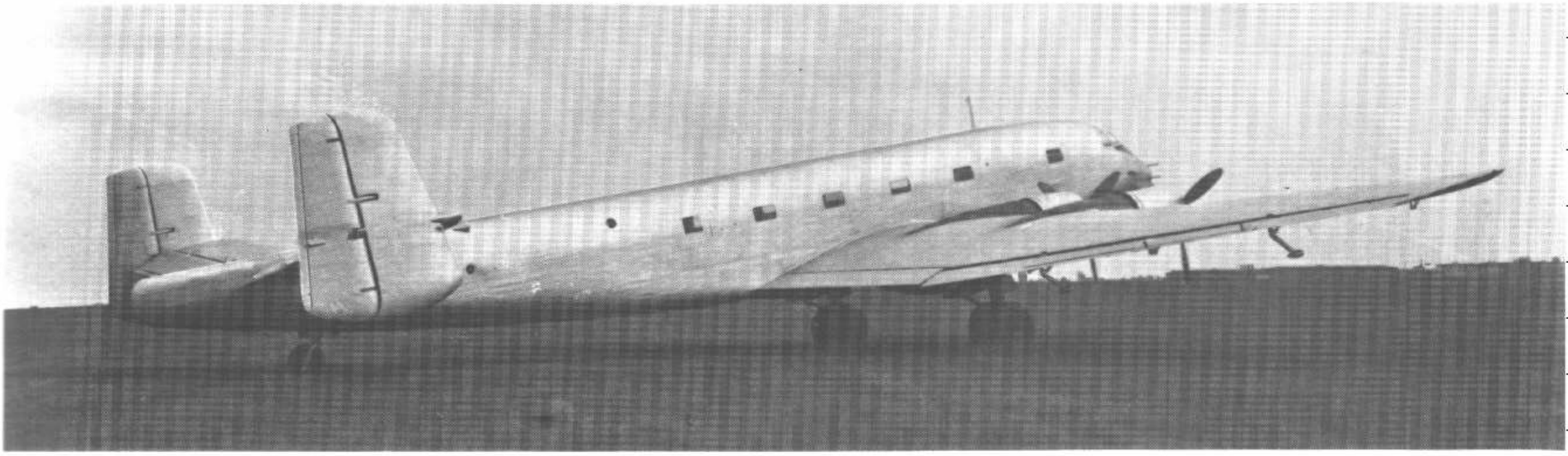
The fuselage of the second Ju 290 A-8, W. Nr. 0212, was found nearly complete together with parts for a Ju 290 B-2 at Lufthansa's repair plant at Ruzyne airfield by liberation forces. These parts were sent to the Letov factory at Prague-Letňany for modification and assembly after the war as the L290 Orel airliner. Several missing parts were found at various Luftwaffe military depots in Czechoslovakia.



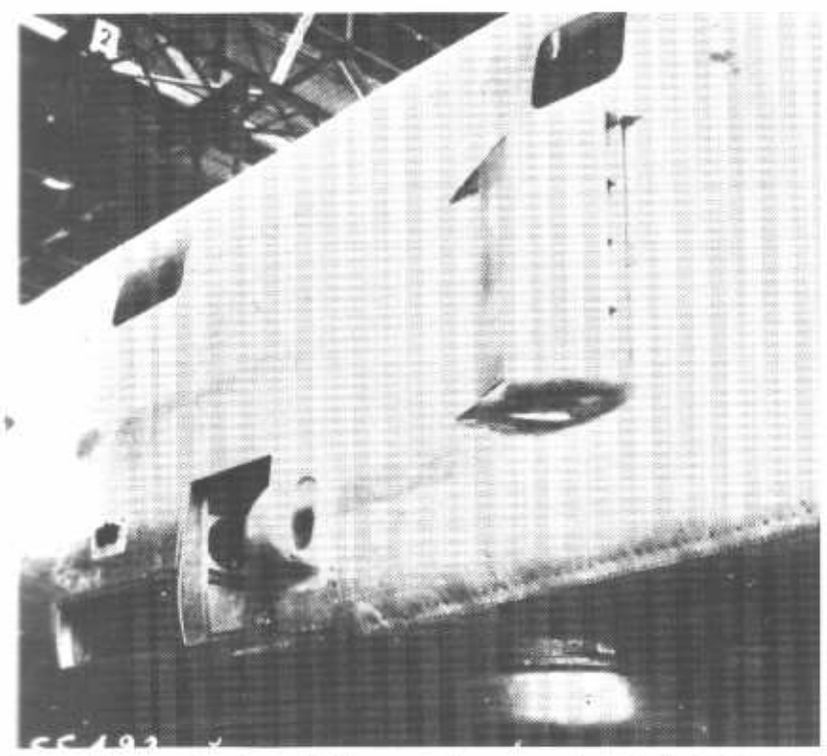
Above and Below: Six views of the L 290 "Orel" during final construction. Main gear tires were 1320 x 450, tailwheel was 875 x 320.

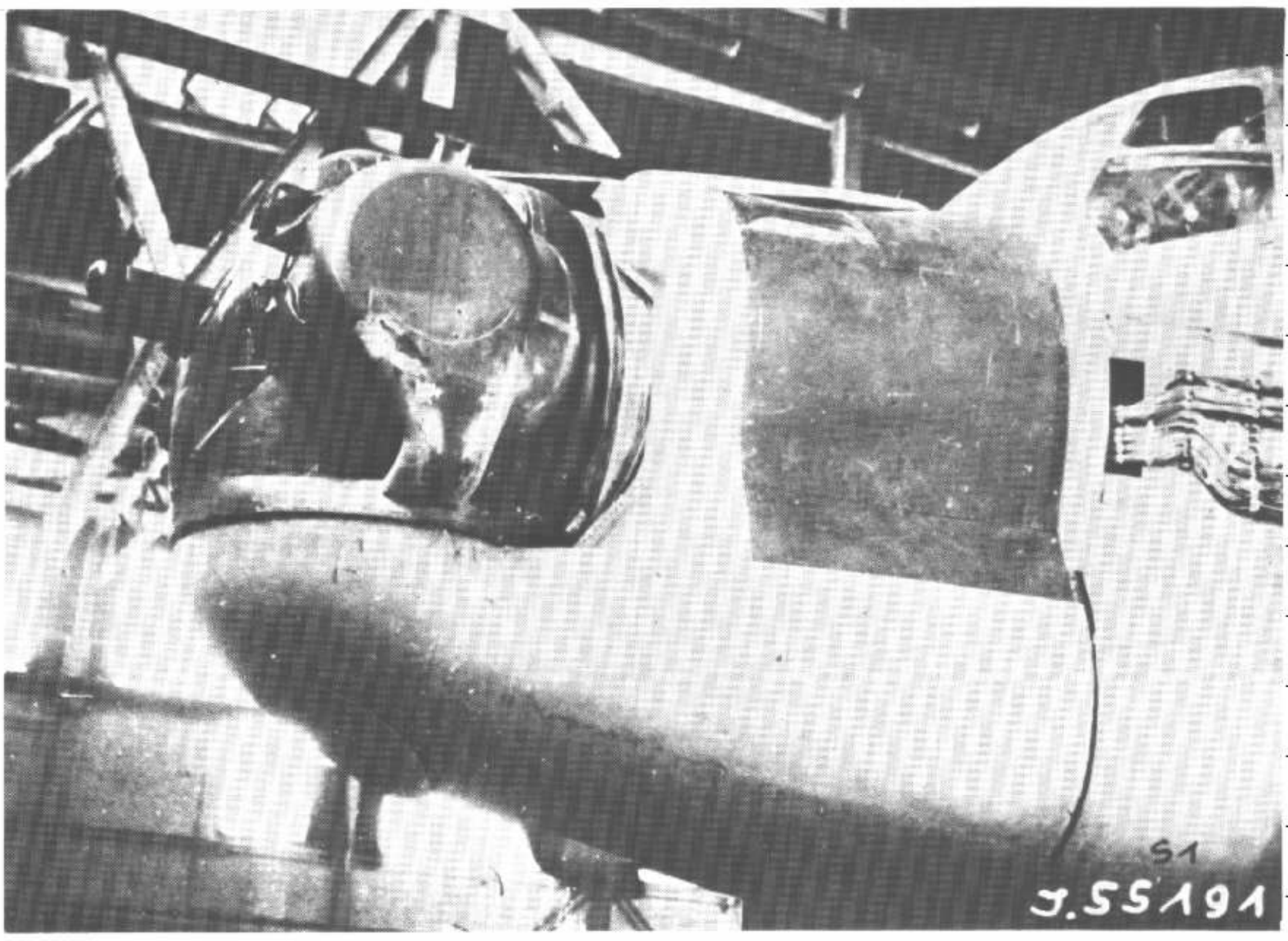






The **Ju 290 A-9**, the last A-series subtype, was in fact produced prior to the construction of the A-7. Three examples were produced during January 1942. These, powered by the BMW 801G or D engines, were fitted with increased internal fuel tankage providing a maximum range of 5,160 miles. Because of their range, all three were used to fly priority cargo to Japan early in 1944. Defensive armament was, however, reduced to the MG 151/20 contained in the gondola, forward dorsal FW 19 turret and tail position.





Top: Three photos of the newly completed L 290 "Orel." Above: Close-up of right side of Ju 290 A-9; W. Nr. 0184. Note special intake for pressurization equipment. Right: Close-up of the final A-9; W. Nr. 0184. Flown to Prague from Bernburg where pressurization equipment was being prepared. Borsig was experiencing delays with its quad MG 131 nose and tail turrets, consequently only wooden mockups of these units were installed. The ultimate fate of the prototype is unknown although it was still in existence near Prague during the early months of 1945.

THE JUNKERS Ju 290B SERIES

The Bruno series of the Ju 290 was evolved during 1943 as a long-range reconnaissance heavy bomber incorporating a number of significant design and engineering changes distinct from the A-series. Engines for the B-series were slated as four of the more powerful BMW 801E's each developing 2,000 hp for takeoff.

Three versions were planned: the **Ju 290 B-1** high altitude, long-range reconnaissance model, the **Ju 290 B-2** heavy reconnaissance bomber and the **Ju 290B MS** (Minensuche-Minesearch) maritime mine sweeper.

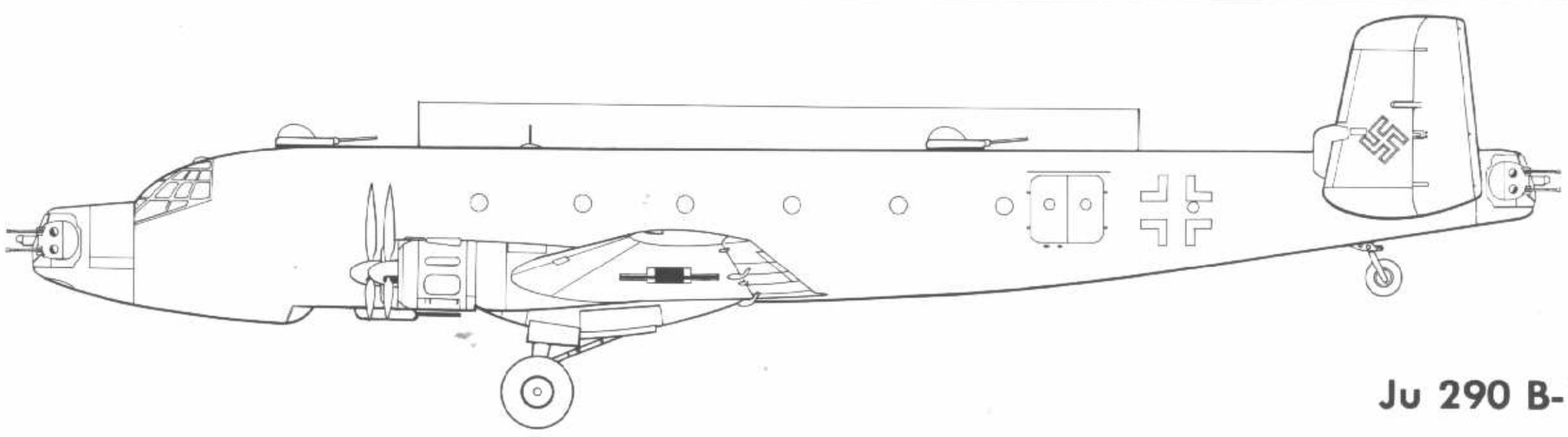
Although an A-series prototype was allotted to the B program (Ju 290 A-9; W. Nr. 0184) in mid 1944, no true B-series aircraft was completed. However, the Bernburg plant had actually cut metal on a preproduction batch of Ju 290 B-2's although these efforts came to nothing. For by November 1944 production contracts then outstanding on all bomber types were cancelled.

In addition to the engines, the B-series also featured considerable structural strengthening. The loading ramp feature common to the A-series was deleted for the first time and circular fuselage windows replaced the rectangular ones. The Ju 290 B-1 was intended as a high altitude model featuring pressurization for cockpit and gun turrets. Tests were conducted at Prague but poor progress led to the eventual abandonment of the scheme.

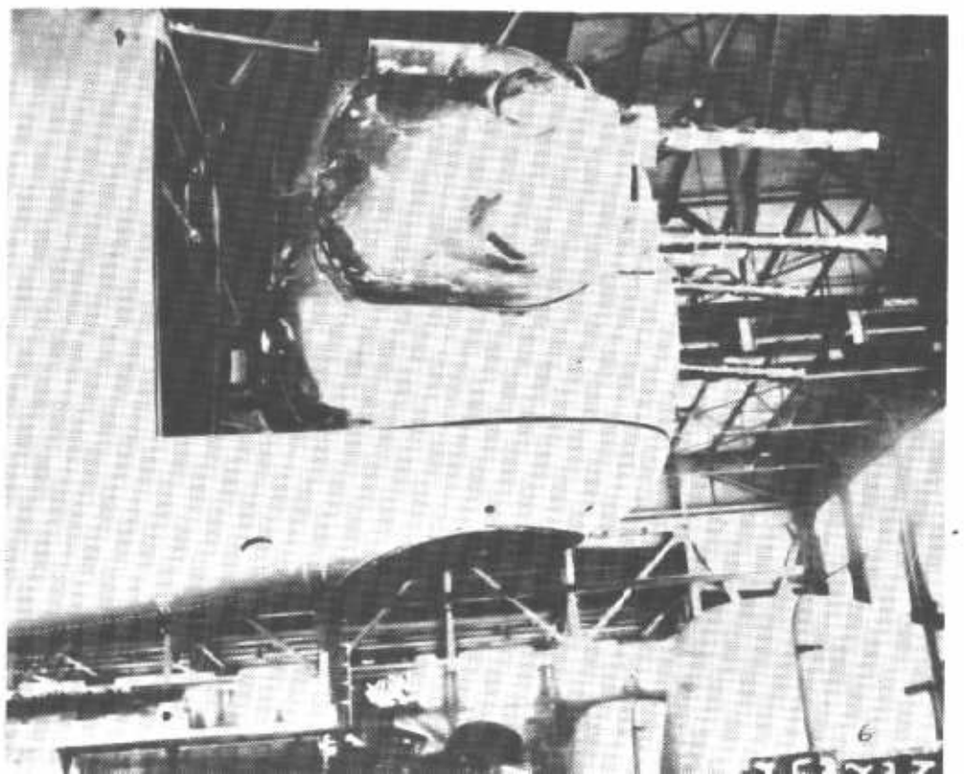
The Ju 290 B-1 was scheduled to receive two HL 131V power turrets designed by Borsig each containing four 13 mm machine guns with 1,300 rpg. Additionally, two dorsal HD 151Z turrets, each containing twin 20 mm cannon with 3,200 rpg plus a remotely controlled ventral FDL-C 151Z turret housing twin 20 mm cannon each with 800 rpg was planned. Prototype construction had begun but before it was completed, the B-1 series was abandoned in favor of the nonpressurized B-2 series.

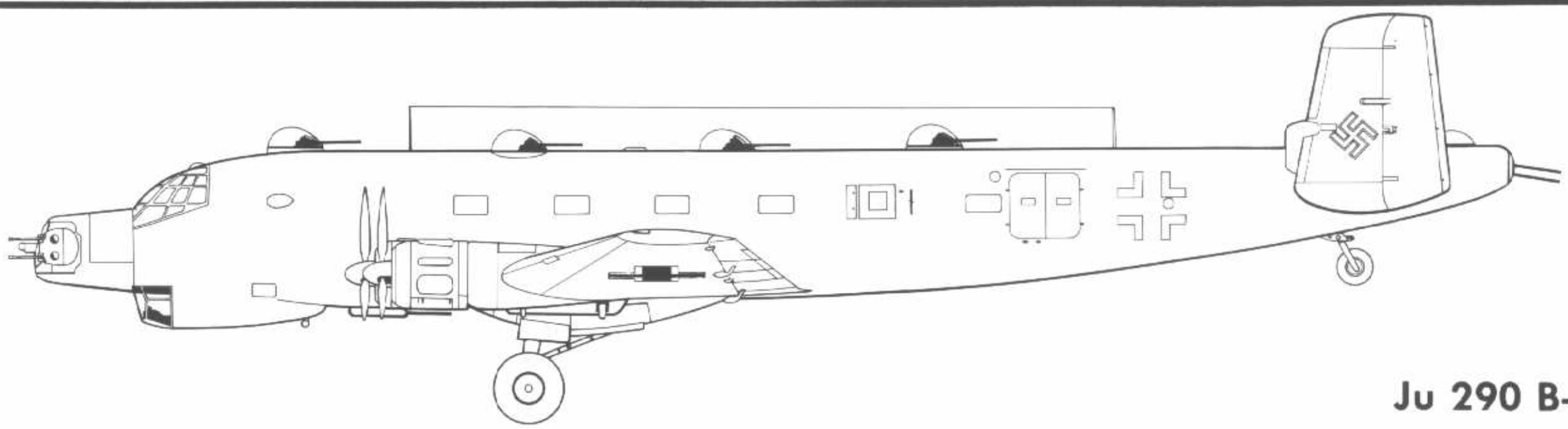
The Ju 290 B-2 would have constituted numerous changes over the B-1 series in addition to the decision to delete the troublesome crew pressurization. Defensive armament would have been altered to include four additional stations making this version the most heavily armed 290. Although the nose turret HL 131V of the B-1 was retained, the tail turret was changed to contain an MG 151Z mounting twin 20 mm cannon. Dorsal turrets were increased from two to four; these two new stations each picking up an HD 151/2 20 mm cannon. Fuselage side weapons were reinstated at twin 20 mm MG 151Z cannon each. Offensive bomb loads were established at a maximum of 2,205 lb (4400 kg) and could be comprised of pairs of either the Hs 293, Hs 294 or Fx 1400 missiles externally mounted on two wing ETC racks. Initially, up to four Hs 293's or two Hs 293 plus one Hs 294 was thought desirable but the third ETC rack mounted beneath the fuselage would have given clearance problems in the event of a blown tire.

The proposed Ju 290B MS would have carried a large circular mine sweeping ring beneath the wing attached to both wing and fuselage. Only nose and tail turrets were planned with this version.

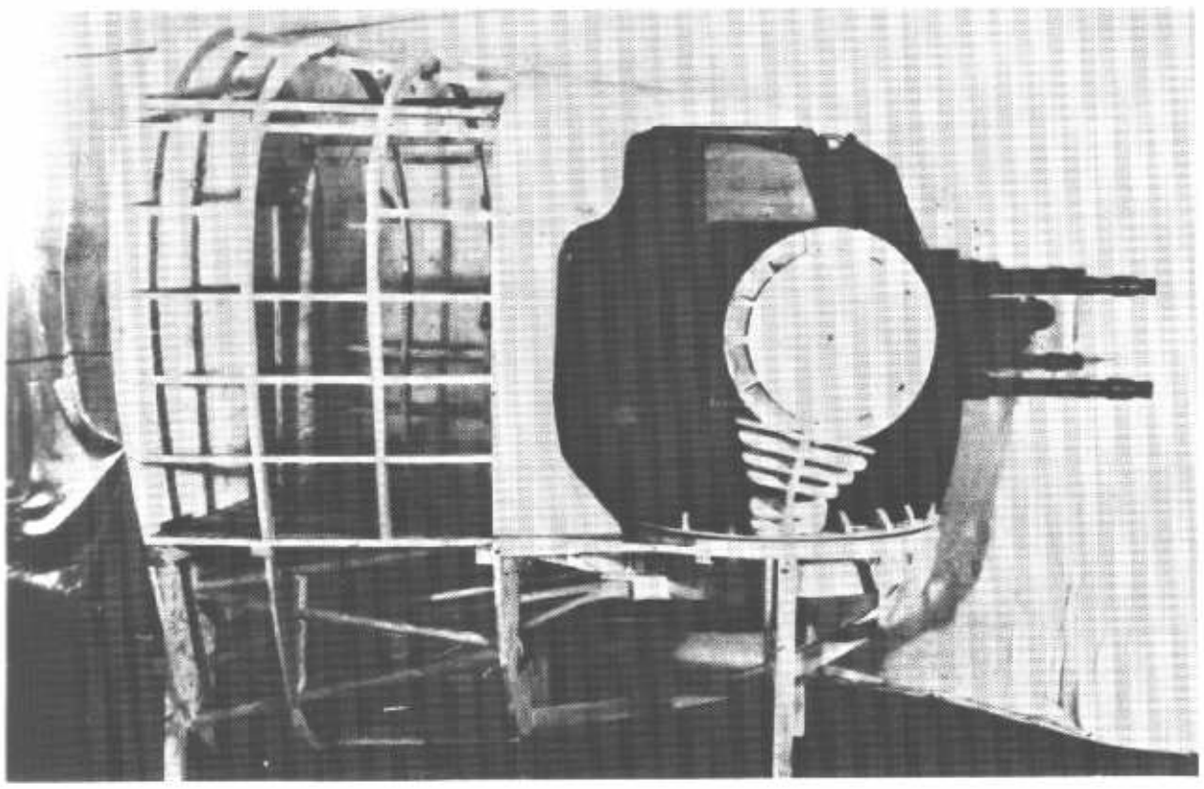


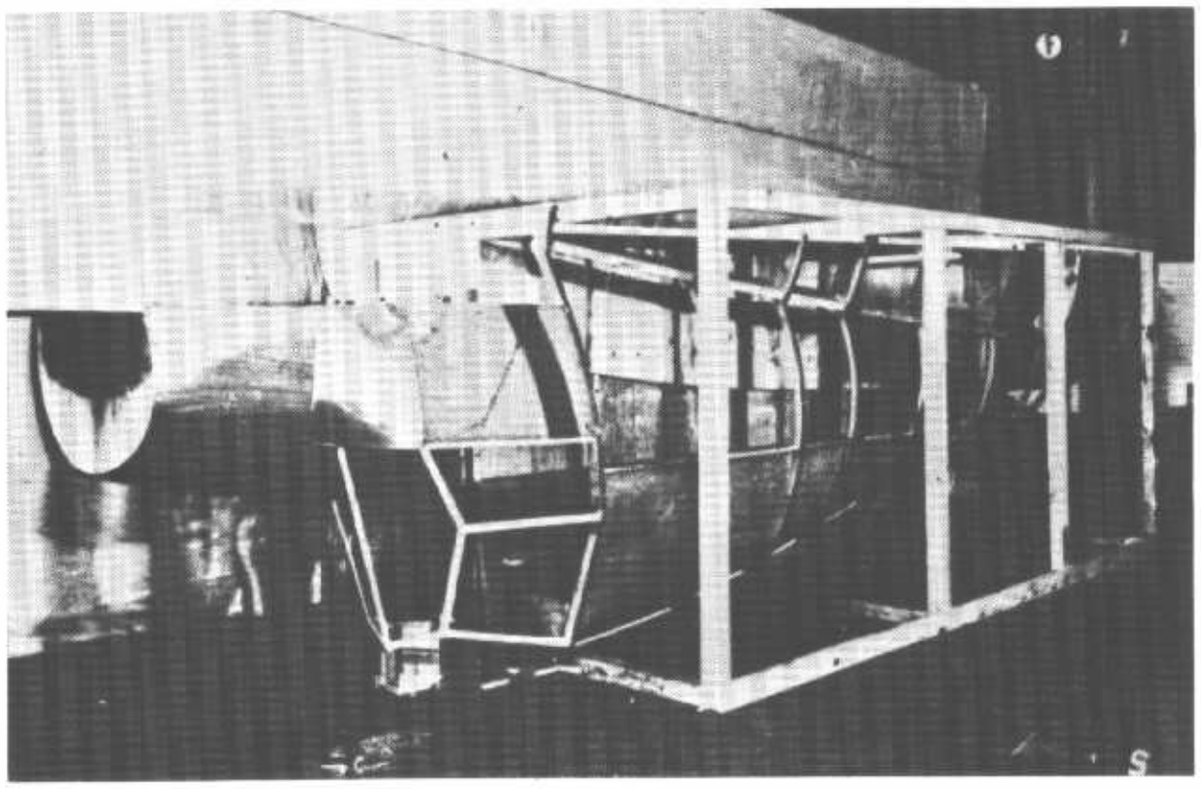
Ju 290 B-1

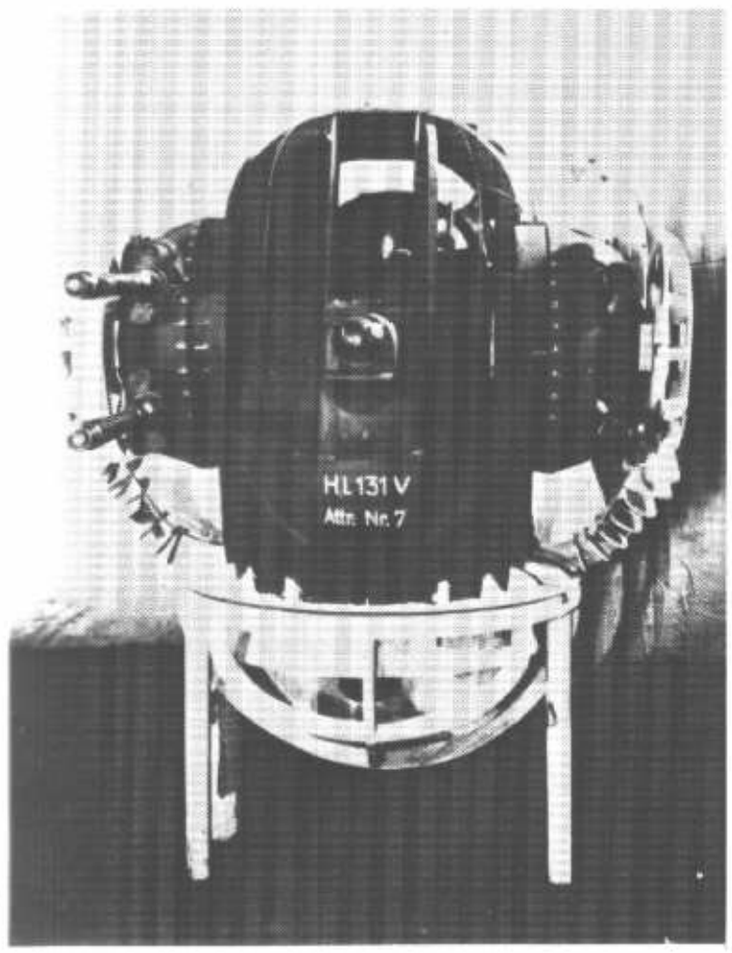


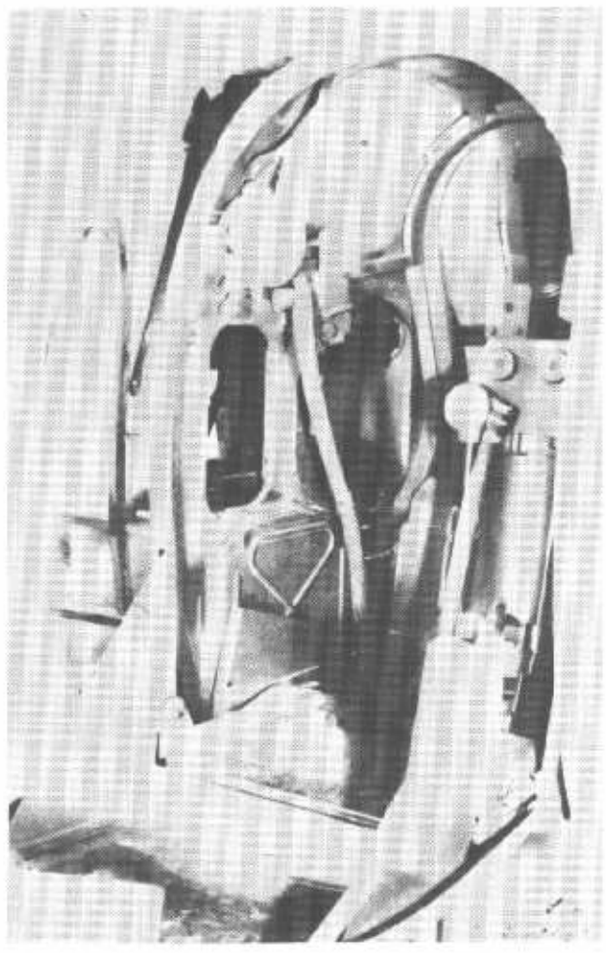


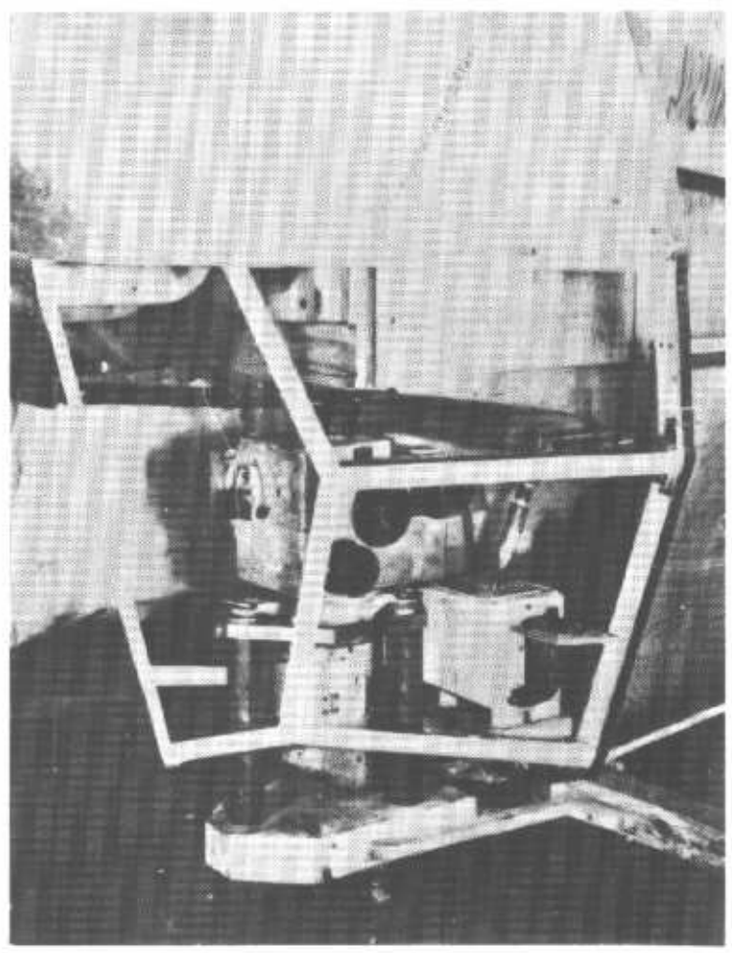
Ju 290 B-2



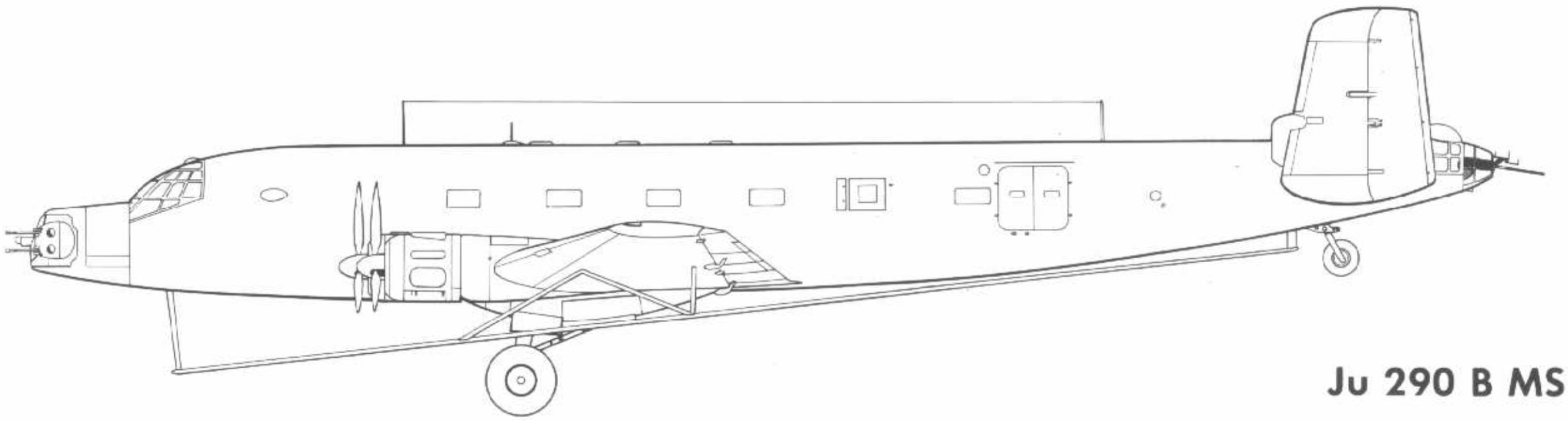




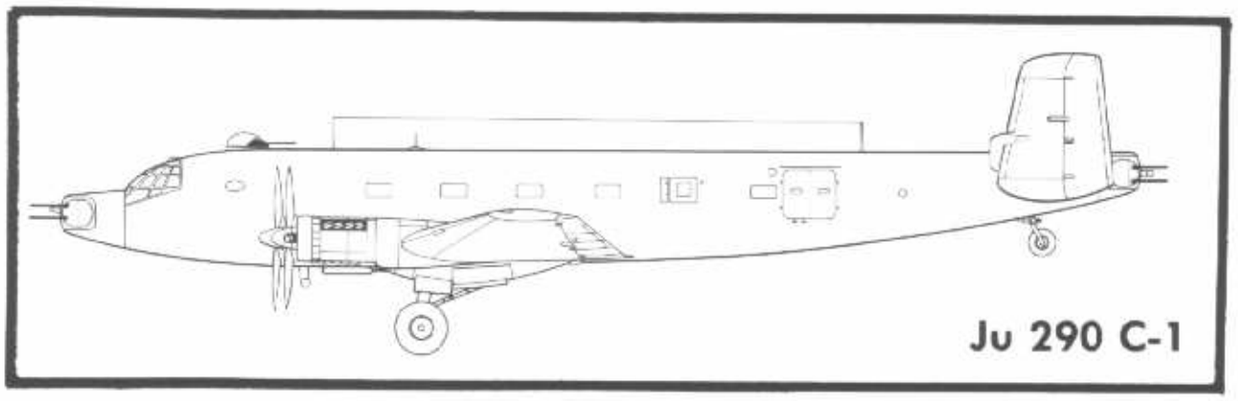


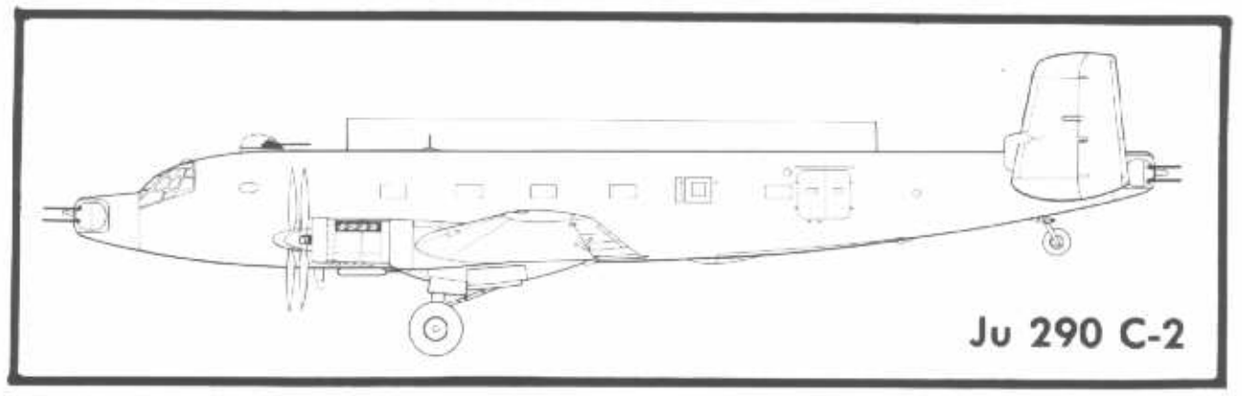


Six photographs depicting various features of the Ju 290 B-2 in mockup form, including the nose turret, the ventral gondola and close-up of the bomb aimer's position.

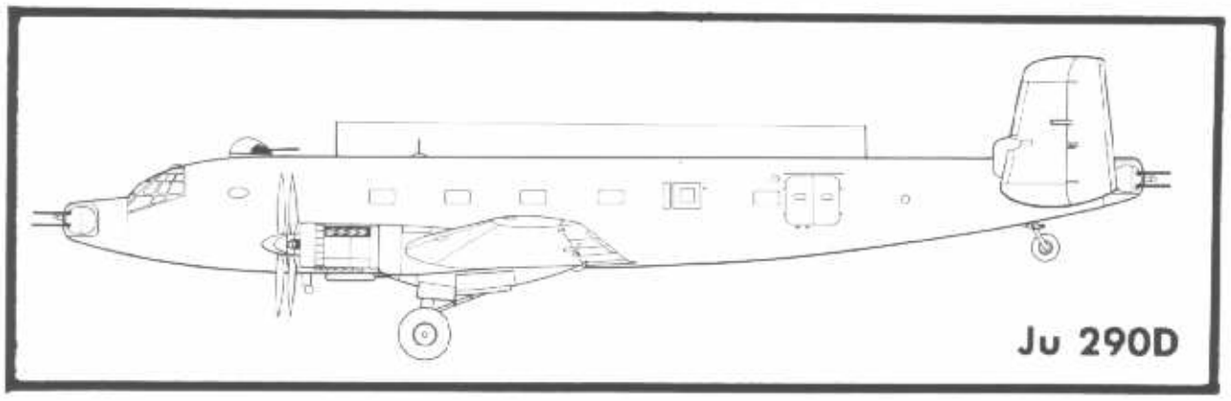


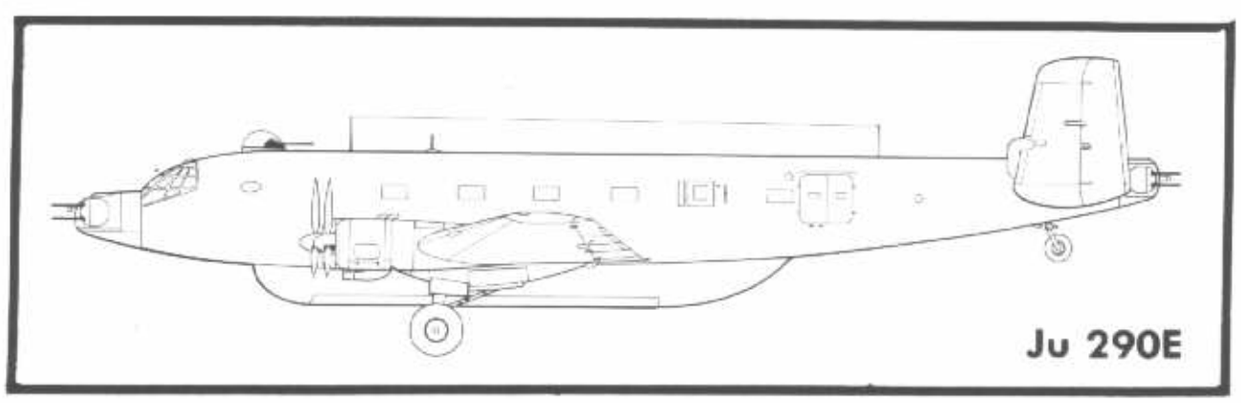
Ju 290 B MS





Several other interesting projects were evolved prior to the cancellation of all work on the Ju 290. The **Ju 290 C-1** long-range bomber would have been similar to the Ju 290 B-1 apart from the engines and deletion of the under-nose gondola. The **Ju 290 C-2** variant would have been a long-range transport fitted with an improved loading ramp. The rear dorsal turret was also deleted from this model. Engines slated for the C-series were the Jumo 222. Junkers had initiated development of this powerful 2500 hp liquid cooled radial engine in 1939, but by mid 1942 the flow of flight cleared units amounted to only a trickle. It will be remembered that the operational debut of the Ju 288 unfortunately was tied to this powerplant. (See *Monogram Close-Up 2*)





The **Ju 290 D-series** was a projected long-range bomber similar to the C-1 long-range bomber apart from the deletion of the second fuselage fuel tank which was required by installation of Hs 293 glide bomb equipment.

Finally, the **Ju 290 E-series** was a projected night bomber based on the Ju 290 C-1 series but featuring extensive structural redesign to enable an internal bombload of 40,551 lb to be carried in a long wooden bulged bombbay. Although initially four BMW 801 TJ's were specified, it was hoped that production of the Jumo 222 A/B-2 could be expected in 1945 equaling 50 units per month with production of the improved Jumo 222 C/D and Jumo 222 E/F to commence soon thereafter.

Ju 290 OPERATIONS

In addition to the dramatic story recounted in the introduction, the Junkers 290 participated in a number of daring exploits during the Second World War. Another example took place on January 13, 1943, involving the first prototype at Stalingrad. Pressed into active duty as a troop transport and attached to KGrzbV 200 (a special mission unit) the Ju 290 V1 took part in Göring's futile Stalingrad airlift. Arriving for the first time at nearby Pitomnik airfield on January 10, 1943, pilot Flugkapitän Hänig landed safely in the shrinking German defense perimeter unloading fresh supplies and loading wounded. A safe return to the rear was carried out without incident. However, on the second takeoff from Pitomnik airfield three days later, a sudden shift of wounded aboard the aircraft resulted in the aircraft's stalling too low to recover. The subsequent crash killed the crew and seventy-nine wounded Sixth Army troops. A second Ju 290 (Ju 290 A-0) was dispatched to Stalingrad but upon arrival over Pitomnik, Soviet LaGG-3 fighters intercepted the Junkers on final approach inflicting extensive damage. The damage was such that it was decided to abort the mission and return to base for repairs. Three days later the Soviet Army captured the airfield at Pitomnik.

Prior to the Stalingrad debacle, Hauptmann Heinz Braun was assigned command of a special four-engined transport group on January 2, 1943, at Berlin-Tempelhof. The unit was composed of transport aircraft crews and mechanics taken from both the Luftwaffe and Lufthansa airlines, all under the command of the Lufttransport Chef Berlin. Soon thereafter the designation Lufttransportstaffel 290 (LTS 290) was bestowed which suggests that the unit expected to be outfitted primarily with the Ju 290. However, upon its formation, only two Ju 290 A-1's were on hand with the remainder comprised of seven Ju 90's (V4, V6, V7, V8, three B-1's), the Ju 252 V5 and a FW 200 B-0. All aircraft of LTS 290 were flown operationally from Berlin-Tempelhof in support of the Oberbefehlshaber der Luftwaffe (Luftwaffe High Command) until March 1943. Based at Grosseto, Italy, LTS 290 began operations in the Mediterranean area under the command of Lufttransport-Führer Mittelmeer. Toward the end of April, Hptm. Braun was transferred to a new unit, Fernaufklärungs Gruppe 5 (FAG 5), a long-range maritime reconnaissance unit and Gerhard Wasserkampf, former Technical Officer for LTS 290, became its new Staffelkapitän. By this time, however, LTS 290 had lost both of its Ju 290 A-1's and the unit was redesignated Transp. St. 5 (Transport Staffel 5).

After the RLM had approved the recommendation to adopt the Ju 290 to long-range maritime reconnaissance role, a Ju 290 A-2 was selected for modification. The first A-2 went directly to the Luftwaffe's test center at Rechlin while the two additional A-2's went directly to FAG 5. This unit was activated officially with two squadrons on July 1, 1943, for the express use of the Ju 290 in the maritime reconnaissance role. On October 15, 1943, I./FAG 5 began operations from Mont de Marsan, south of Bordeaux, France, outfitted with Ju 290 A-2's and A-3's.

In November 1943, 2./FAG 5 also became operational in shadowing Allied convoys. The radius of action undertaken by FAG 5 extended south to the west African coast, west to the Azores and north to the North Channel and Hebrides. The Junkers 290 A-2's, A-3's, and A-4's performed their mission well. The valuable information sent back enabled the sizeable German U-boat fleet to send over 10,000,000 tons of Allied merchant ships to Davy Jones's locker. On-station over such a vast area

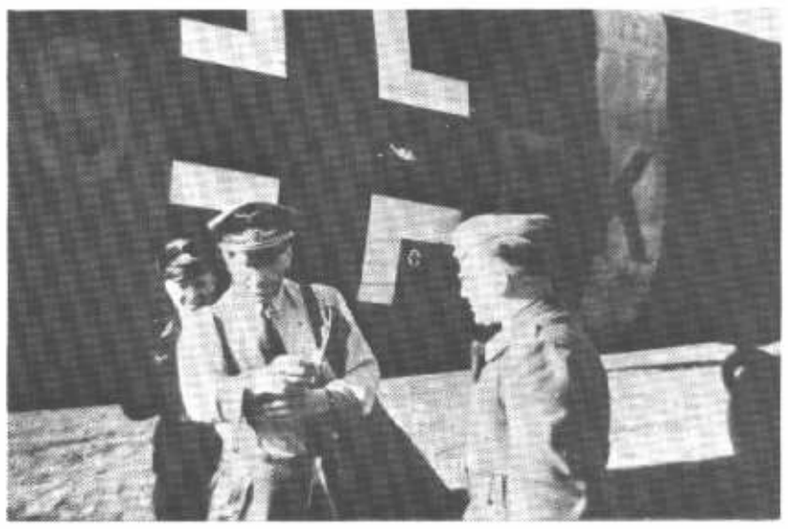
Ju 290 A-5; 9V+BH. Note FuG 101 radio-altimeter

was accomplished in shifts with one Ju 290 replacing another after several hours. Early in 1944, 4./FAG 5 was established with the receipt of the first Ju 290 A-5's but hopes of outfitting four squadrons with the Ju 290 proved excessively optimistic. Only a few Ju 290's were on strength with 4./FAG 5, the Dornier 217 and Heinkel 111 comprising most of the inventory. After D-Day the mission of FAG 5 was rescinded and in August 1944 the unit was disbanded altogether, part of its surviving aircraft being transferred to I./KG 200 based at Finsterwalde, commanded by Major Gartenfeldt. However, six Ju 290's were transferred to Deutsche Lufthansa. Many of these aircraft became casualties of Allied attacks on airfields.

The range of the Ju 290 was such that in early 1944 three Ju 290 A-9's were requisitioned from FAG 5 to participate in ultra-long-range missions. Transporting aircraft engines and other special cargoes, each Ju 290 flew nonstop from Odessa in the Ukraine to Japanese Manchuria.

Luftwaffe officers boarding 9V+BH.

Return flights carried valuable strategic materials in short supply in Germany. At least three round trip flights were conducted from airfields at Odessa and Mielec to Manchuria without loss before these were discontinued. After receiving the aircraft from FAG 5 in August 1944, I./KG 200 undertook to modify several Ju 290's for "special missions." Late in November 1944, the newly formed 3rd Staffel received several Ju 290's which were modified for dropping agents by the addition of a special drop hatch in the fuselage. By March 1945 no fewer than 600 agents including 10 women had been parachuted by KG 200 on special missions behind Allied lines.



Hptm. Gartenfeld after disembarking T9+FK, Saarabus, 1943.

Late in 1944 and early in 1945, 14./TG4, also known as Transp. St. 5 (formerly LTS 290) operated the Ju 290 in concert with I./KG 200. Gruppenkommander Hauptmann Heinz Braun now commanding I./KG 200 undertook at least one and possibly more NSDAP escape missions to neutralist Spain. On April 26, 1945, the sole Ju 290 A-6 flew its secretive manifest from Finsterwalde to Barcelona. Still another secretive flight to Spain four days later involved "Alles Kaputt" (the same aircraft which flew the Atlantic). Flying from Hörsching to Barcelona Hauptmann Braun and his crew were instructed to wear uniforms for the flight in the event of a forced landing over Allied territory. It is interesting that, with the exception of 2nd Radio Operator Uffz. Schlegel, First Mechanic Ofw. Baroff, Second Mechanic Ofw. Mosbech, Gunner Uffz. Etzelsdorfer and Engineer Uffz. Titschkus, this crew was the same which surrendered "Alles Kaputt" in Munich.

In May 1950 the Spanish government purchased the Ju 290 A-6 from the Allied Commission. When all necessary repairs and the installation of new equipment at Leon were completed, the aircraft served the Spanish Escuela Superior de Vuelo (Advanced Flight School) at Salamanca-Matacan. After several years of service the aircraft was scrapped as serviceability was becoming a major problem.

Left: Obl. Nebel (pilot of T9+FK), and
Right: Lt. Gotz, both of Versuchsverband OKL.

The final chapter on the Junkers 290 story concerns the Czechoslovakian derivation known as the L 290 "Orel" (Eagle). Upon liberation of Ruzyne airfield near Prague the second Ju 290 A-8, W. Nr. 0212, was uncovered partly assembled. This aircraft plus components of a Ju 290 B-2 were collected and transported to the Letov plant where modifications began to reconstruct the A-8 airframe as a 40-48 seat commercial transport. The only items not available were original propellor blades. Instead, standard FW 190A blades were substituted and, although somewhat shorter, they sufficed.

Thus completed the "Orel" was flown for the first time on August 1, 1946, by test pilot F. Klaclek. The first flight lasted two hours during which trim tests were made in flight owing to incomplete information concerning the center of gravity. In September 1946 the Orel was exhibited for the first time at an airshow held at Prague-Ruzyne. Passenger seats were not fitted since center of gravity problems persisted. Following the airshow the aircraft was returned to Letov for additional tests. Wooden trays finally were fastened to the floor containing sandbags in one last attempt to locate the true center of gravity. In 1947 after 43 hours of accident-free service, the project was abandoned.

Naturally the Czechoslovak Airlines took little interest in the type and after some years of dormancy it was disassembled with the fuselage going to the National Museum of Technics in Prague. Finally all parts were scrapped in 1956. As a point of speculation, however, it came close to being sold to the neophyte Israeli Air Force in 1947, but final arrangements were not concluded.

CAMOUFLAGE

I. A two-color splinter pattern of Schwarzgrün/70 (Black-green/70) and Dunkelgrün/71 (Dark green/71) over all upper surfaces. Undersurfaces were Hellblau/65 (Light blue/65) meeting the upper surfaces in a relatively soft demarcation line.

II. A two-color splinter pattern of Grün/72 (Green/72) and Grün/73 (Green/73) over all upper flying surfaces including the top decking of fuselage extending downward to a point approximately level with the windows. All undersurfaces were the usual Hellblau/65 (Light blue/65).

III. A two-color mottle pattern of Dunkelgrau/74 (Dark gray/74) over a base of Mittelgrau/75 (Medium gray/75) on all flying surfaces including the top decking of the fuselage. All undersurfaces in Schwarz/22 (Black/22).

Each of the above schemes generally reflected the role played by the Ju 290. Scheme I was used throughout its early career and conformed with the colors allotted to land based bomber and transport types. Scheme II evolved soon after the Ju 290 was selected for the maritime reconnaissance role. The two shades of green (72/73) were specified for types operating over water. The painting of light blue up the fuselage sides to include the vertical tailplane was a concession for optimum airborne concealment. In some instances this scheme was modified by mottling the green lightly over the fuselage sides as shown on our cover photo.

Scheme III resulted from the Ju 290 being withdrawn from maritime operations. This occurred during the winter of 1944-45 and was in force until the end of the war. Our color rendering on pp 16 & 17 graphically depicts this scheme.

Other external items subjected to painting did vary from model to model. These included the prop spinners (color 70) and the metal prop blades (color 70 or 71). Wooden prop blades were painted a dark gray not unlike color 66 Schwarzgrau (Black gray). Wheel hubs were a mix of 00 Wasserhell (clear) and 22 Schwarz giving them a semigloss finish. Landing gear struts were finished in RLM Gray 02 which was essentially an anticorrosion paint. Inner surfaces of the outer Duraplate were to receive a single protective coat of an unspecified shade.

The following is taken from the Ju 290 A-5 handbook.

IV. Oberflaechenschutz (Surface Protection) Inner Parts:

All parts made of Dural or Duralplat are oxydized and caulked by Potassium-Bichromate. RLM instructions for the oxydizing of light metals should be observed.

Aluminum sheet metal parts get a single coat, welded parts with thread or rubbing against each other are oxydized. Hydroalium remain unprotected. Solid parts, cast and welded parts are oxydized. Pantal sheet parts, solid parts, cast and welded parts with thread are oxydized, tubes and pipes (except hydraulic pipes), containers (tanks) and welded parts without thread receive no protection. Elektron parts get a double coat. Steel parts are zinc-coated or get a double coat of paint. The heads of steel rivets also get a double coat, all other rivets remain unprotected.

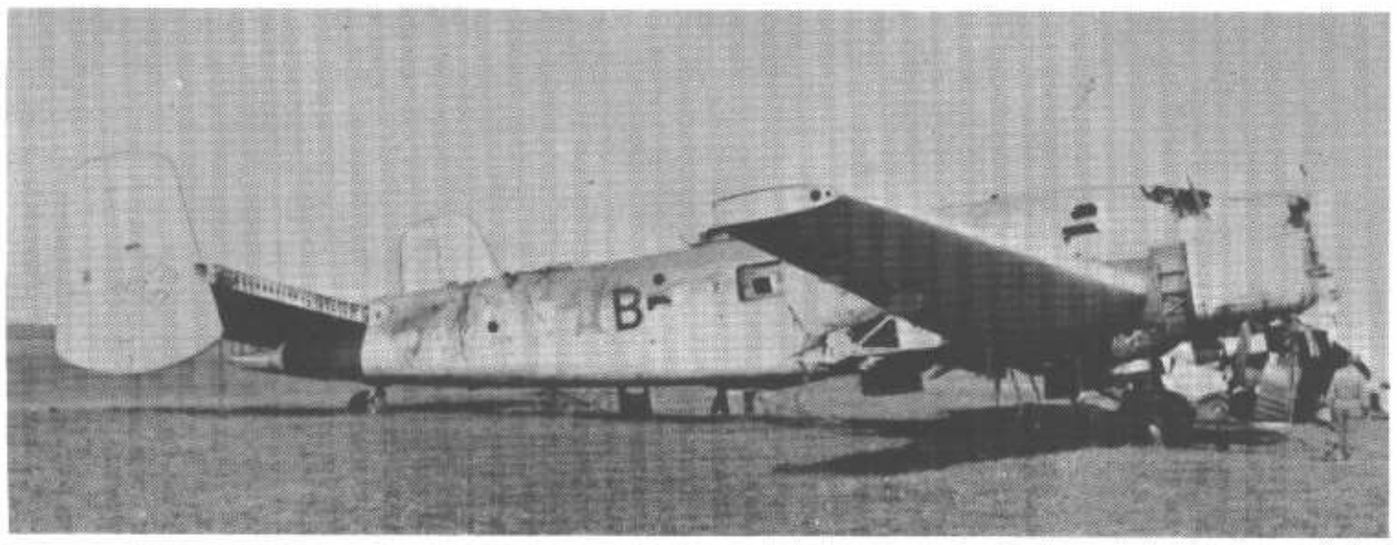
MARKINGS

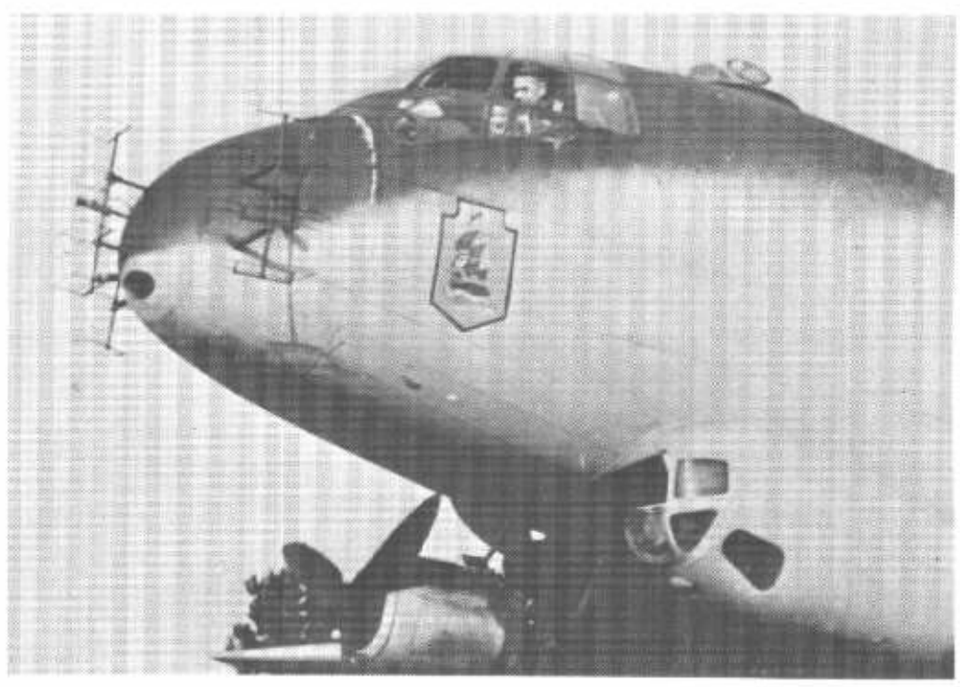
Markings refer to identification numbers, letters, bands of color, or unit insignia making one aircraft distinguishable from another.

A four-letter code system was allotted, painted in black on the rear fuselage and underwing positions. Later when Scheme III was introduced, these letters (as well as the national cross) on the fuselage were painted RLM 77 light gray. After delivery to one of the 290 units, a new code was often applied, sometimes utilizing part of the earlier letter code where appropriate. The following unit codes were used:

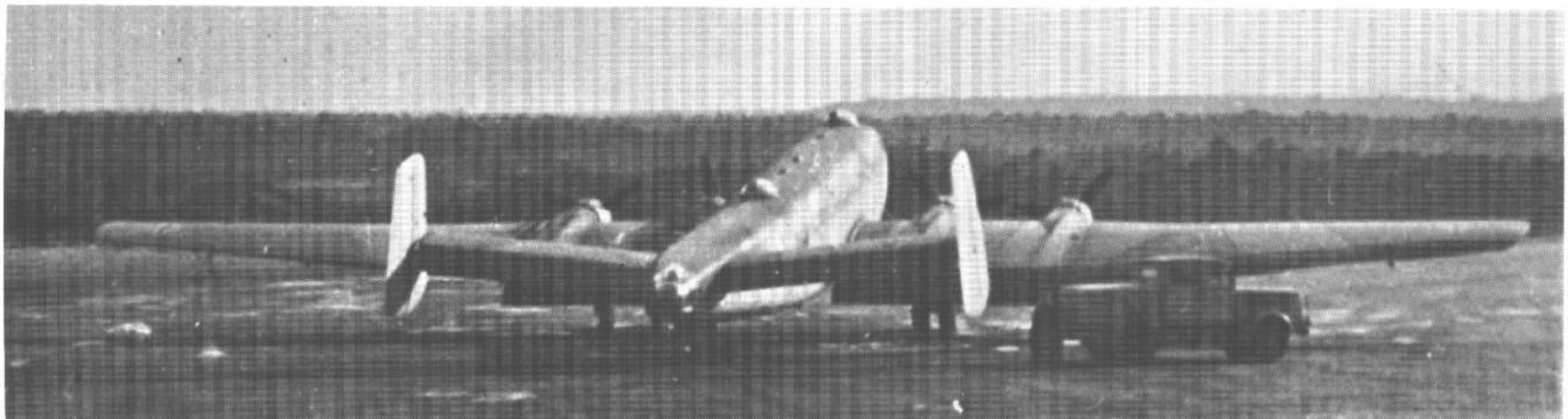
J4 —allocated to Transp. St. 5
9V —allocated to FAG 5
A3 —allocated to KG 200
G6 —allocated to TG4
T9 —allocated to Versuchsverband OKL

Several examples of the Ju 290 including the V2, V3, A-1's, A-2's and some A-3's carried distinctive tail bands. Initially these bands were yellow but by 1943 white was overpainted to a width of 480 mm (19 in) forward of the tailplane by 350 mm (14 in). The wing tips were often yellow on the undersides for a length of 5944 mm (19 ft 6 in). One Ju 290 A-1 (W. Nr. 0152) carried an additional white band 500 mm (1 ft 8 in) wide on the upper and lower wing surfaces 1646 mm (5 ft 3 in) from the outer edge of each outboard engine nacelle (measured along the leading edge).





Above: Remains of Ju 290 A-5, "Green A" of Stab I./KG 200, possibly W. Nr. 0171, A3+AB. Right: Close-up of Ju 290 A-5; 9V+BH graphically shows the FuG 200 search antenna and emblem of FAG 5. Below: Rear view of 9V+BH displays well the low profile of the Seeadler.

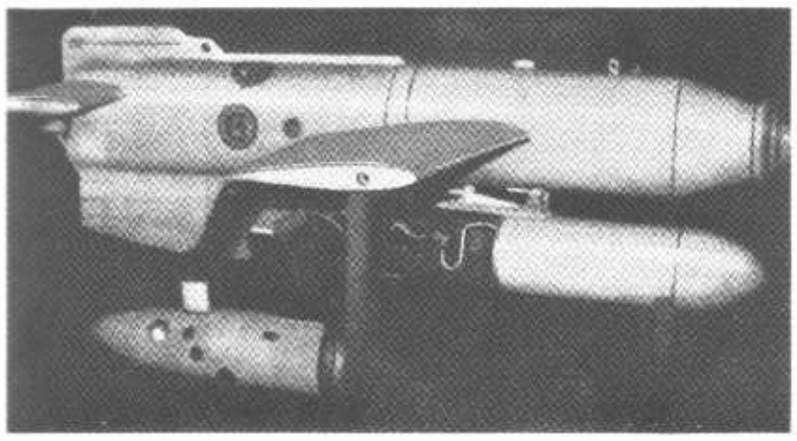


ORDER OF BATTLE (From Luftwaffe Quarter Master General)

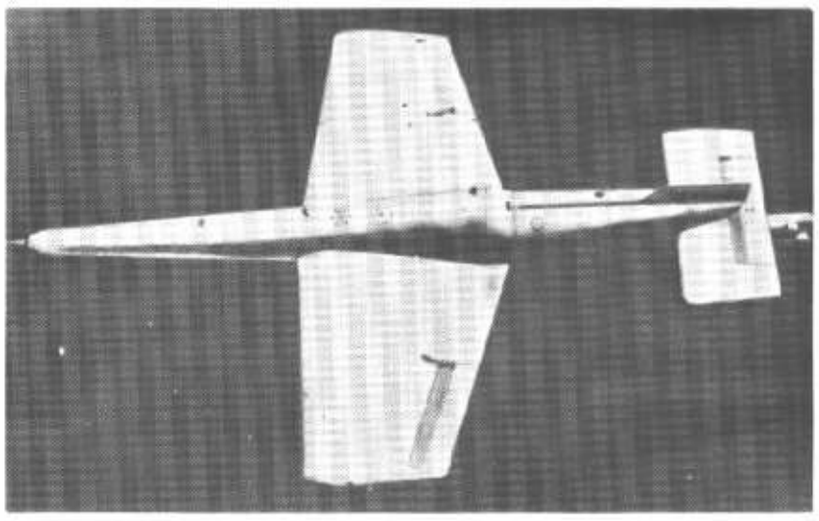
10/Apl/43	Ju 90/290 Staffel	Ju 90, Ju 290, Ju 52/3m	L/Flt 2* 10 (6)
10/May/43	Ju 90/290 Staffel	Ju 90, Ju 290	L/Flt 2 7 (3)
10/Jun/43	Ju 90/290 Staffel	Ju 90	L/Flt 2 7 (2)
10/Jul/43	Ju 90/290 Staffel	Ju 90	L/Flt 2 8 (2)
20/Aug/43	Ju 90/290 Staffel	Ju 90	L/Flt 2 7 (2)
20/Oct/43	Ju 90/290 Staffel	Ju 90	L/Flt 2 6 (3)
20/Oct/43	Ju 90/290 Staffel	Piaggio P 108T	L/Flt 2 1 (0)
20/Mar/44	Trans. Sta 5	Ju 90	L/Flt 1 3 (1)
20/Mar/44	Stab/FAG 5	Ju 290	L/Flt 3 1 (0)
20/Mar/44	1./FAG 5	Ju 290	L/Flt 3 4 (2)
20/Mar/44	2./FAG 5	Ju 290	L/Flt 3 4 (3)
31/Mar/44	1./KG 200	Ju 290	— 3 (1)
30/Apl/44	1./KG 200	Ju 290	— 3 (1)
10/May/44	FAG 5	Ju 290	L/Flt 3 13 (5)
10/May/44	4./FAG 5	He 111, Do 217	L/Flt 3 3 (0)
10/May/44	Trans. Sta 5	Ju 90, Ju 252, Piaggio P 108T	L/Flt 4 14 (6)
31/May/44	1./KG 200	Ju 290	— 2 (0)
20/Jun/44	FAG 5	Ju 290	L/Flt 3 16 (8)
10/Jul/44	FAG 5 (Mont de Marsan)	Ju 290	L/Flt 3 20 (7)
20/Jul/44	Stab/FAG 5 (Mont de Marsan (Nantes))	Ju 290	L/Flt 3 1 (-)
20/Jul/44	1./FAG 5 (Mont de Marsan (Nantes))	Ju 290	L/Flt 3 7 (3)
20/Jul/44	2./FAG 5 (Mont de Marsan (Nantes))	Ju 290	L/Flt 3 7 (3)
20/Jul/44	4./FAG 5 (Mont de Marsan (Nantes))	Various	L/Flt 3 3 (1)
31/Jul/44	1./KG 200	Ju 290	L/Flt R 4 (1)
30/Sep/44	1./KG 200	Ju 290	L/Flt R 2 (2)
10/Nov/44	1./KG 200	Ju 290	L/Flt R 3 (2)
30/Nov/44	1./KG 200	Ju 290	L/Flt R 3 (2)
31/Dec/44	1./KG 200	Ju 290 A-4 to A-7	L/Flt R 3 (1)

*L/Flt 2=Luftflotte 2 Following number=total aircraft Number in parentheses=Serviceable aircraft

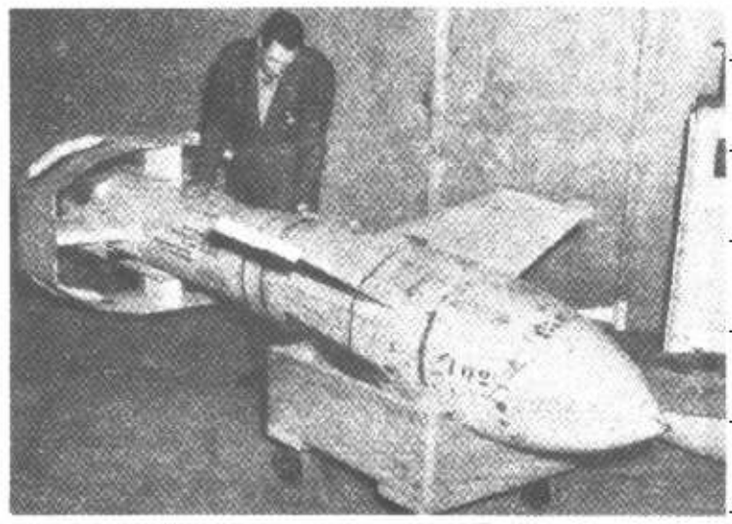
Ju 290 Equipment and Weaponry



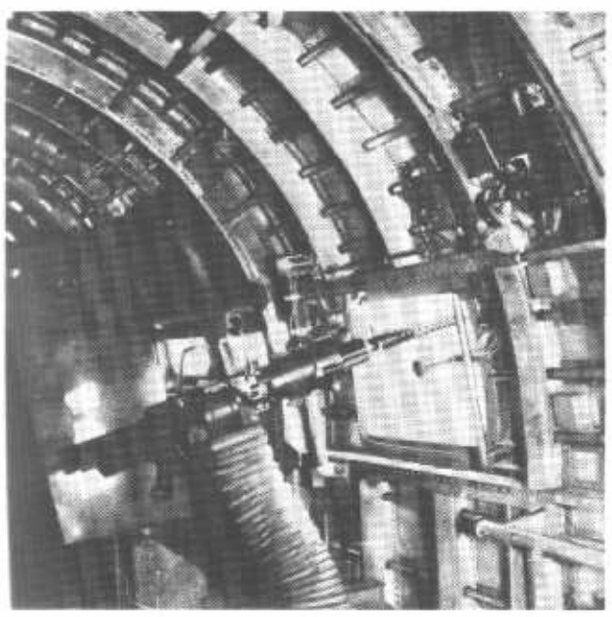
Henschel Hs 293 missile.



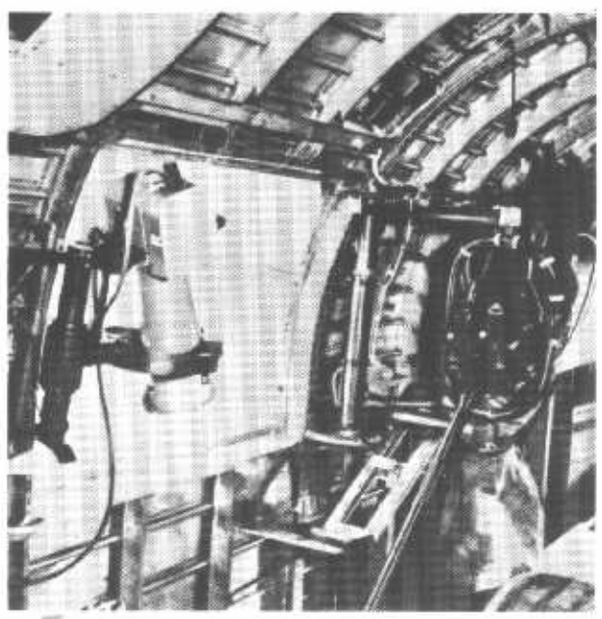
Henschel Hs 294 A-0 missile.



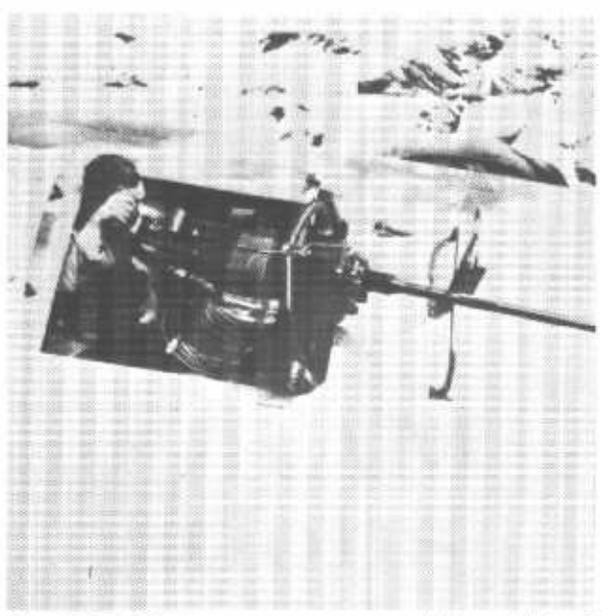
X1 (XF 1400) Fritz X controlled bomb.



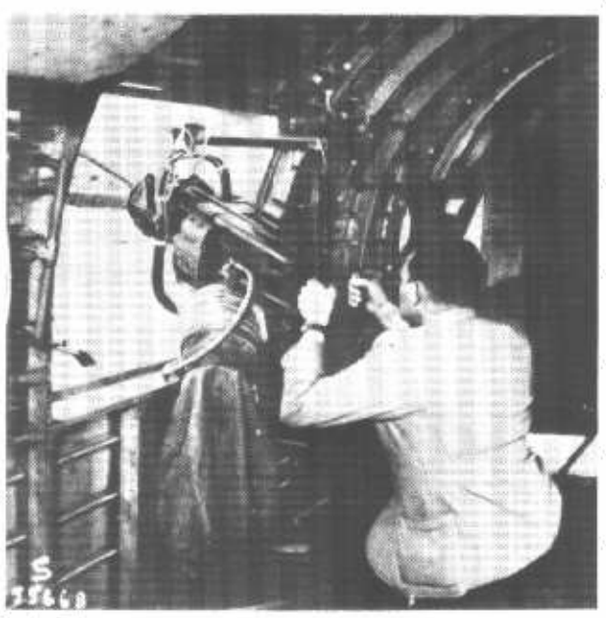
SL 131 13 mm machine gun (W. Nr. 0170).

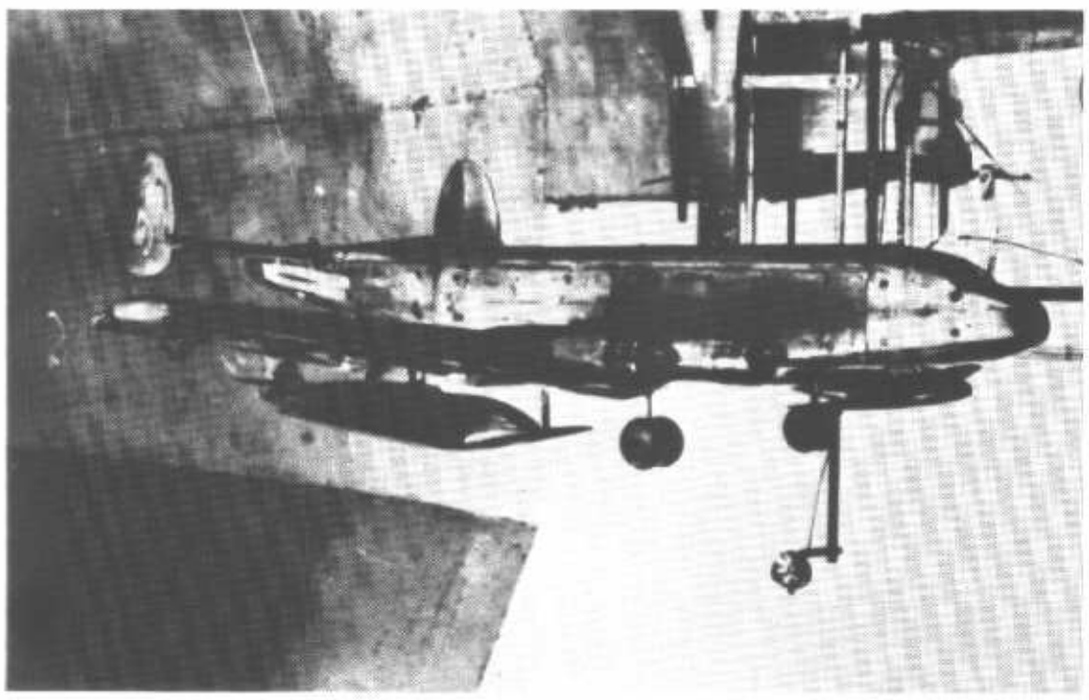


SL Rb reconnaissance camera (Ju 290 A-7).



SL 151 20 mm cannon used by all Ju 290 A-7's.





Two of the more unorthodox schemes involving the 290 specified the aircraft as a carrier for two or three single seat fighters slung beneath the wings and atop the fuselage. The other scheme involved the mating of two standard 290's to form a twin (i.e., He 111Z) capable of sufficient range to bomb New York and return. A stretch derivation of the basic 290 design, the large Junkers Ju 390, will be discussed in detail in Close-Up No. 10, AMERIKA BOMBER.

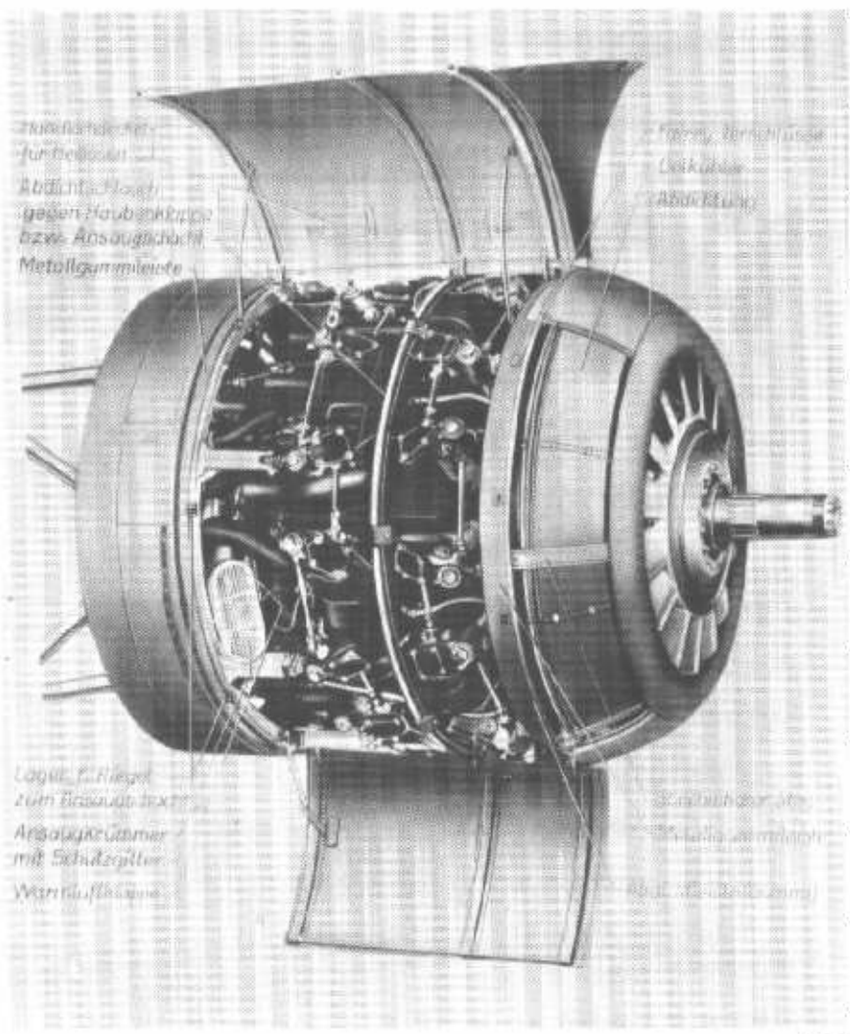
PRINCIPAL Ju 290 ENGINES
BMW 801 ML (right)
14 cylinder air cooled radial
Takeoff output 1,600 hp at 2,700 rpm
Displacement: 41.8L (2,560 cu in)
Bore: 156 mm
Stroke: 156 mm
Props: VDM metal or wooden types
BMW 801D = Bare engine similar to the A-series but operated on 96 octane fuel.

BMW 801E = Similar to the D-series but with different supercharge gear ratios.

BMW 801G = Similar to the D-series but intended for multi-engine aircraft.

BMW 801L = Similar to the A-series but with different prop controls.

"M" Denotes complete cowled engine.



GENERAL SPECIFICATIONS FOR JUNKERS Ju 290 PROTOTYPES AND PRODUCTION MODELS

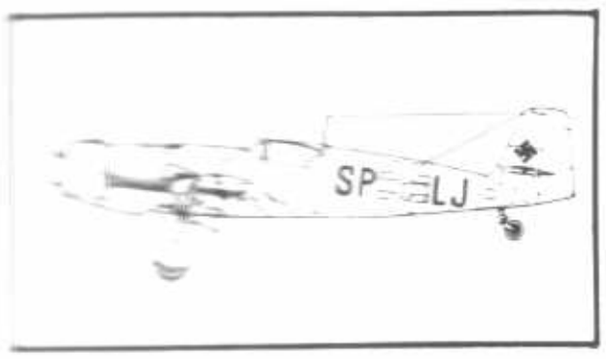
AIRCRAFT	ENGINE X 4	MAX. HP TAKEOFF	FUEL	CREW	ARMAMENT[1] A	B1	B2	B3	B4	C1	C2	S	H	ETC[2]	SPAN	LENGTH	HEIGHT	WING AREA	BOMB LOAD	ROLE
290 V1	801MA	1,600	B4	4	—	—	—	—	—	—	—	—	—	—	137'-9½" 42.00m	94'-2" 28.23m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	—	Transport ex. Ju 90 V11
290 V2	801MA	1,600	B4	8	—	1 x HD151	—	—	—	1 x MG151	1 x MG131	2 x MG131	1 x MG151	—	137'-9½" 42.00m	94'-2" 28.23m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	—	Transport ex. Ju 90 V8
290 V3	801MA	1,600	B4	5	—	—	—	—	—	—	—	6 x MG15	—	—	137'-9½" 42.00m	94'-2" 28.23m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	—	Transport ex. Ju 90 V7
290 A-0	801L-2	1,600	B4	4	—	—	—	—	—	—	—	—	—	—	137'-9½" 42.00m	94'-2" 28.23m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	—	Transport & Test Aircraft
290 A-1	801L-2	1,600	B4	8	—	1 x HD151	—	—	—	1 x MG151	1 x MG131	2 x FL131	1 x MG151	—	137'-9½" 42.00m	93'-11½" 28.60m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	—	Transport
290 A-2	801L-2	1,600	B4	9	—	1 x HD151	1 x HD151	—	—	1 x MG151	1 x MG131	2 x FL131	1 x MG151	—	137'-9½" 42.00m	93'-11½" 28.60m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	—	Maritime Reconnaissance
290 A-3	801L/D	1,600 ~~1,700~~	B4 ~~C3~~	9	—	1 x HD151	1 x FW20	—	—	1 x MG151	1 x MG131	2 x FL131	1 x MG151	—	137'-9½" 42.00m	93'-11½" 28.60m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	—	Maritime Reconnaissance
290 A-4	801D-2	1,700	C3	9	—	1 x FW19	1 x FW20	—	—	1 x MG151	1 x MG131	2 x FL131	1 x MG151	3 x (test)	137'-9½" 42.00m	93'-11½" 28.60m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	—	Maritime Reconnaissance
290 A-5	801D-2	1,700	C3	10	—	1 x HD151	1 x HD151	—	—	1 x MG151	1 x MG131	2 x FL131	1 x MG151	—	137'-9½" 42.00m	93'-11½" 28.60m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	—	Maritime Reconnaissance
290 A-6	801D-2	1,700	C3	5	—	1 x HD151	—	—	—	—	—	—	1 x MK103	—	137'-9½" 42.00m	93'-11½" 28.60m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	—	Maritime Reconnaissance
290 A-7	801D-2	1,700	C3	10	1 x MG151	1 x HD151	1 x HD151	—	—	1 x MG151	1 x MG131	2 x FL131	1 x MG151	3 x	137'-9½" 42.00m	95'-7¾" 29.15m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	—	Special Transport
290 A-8	801D-2	1,700	C3	13	1 x MG151	1 x HD151	1 x HD151	1 x HD151	1 x HD151	1 x MG151	1 x MG131	2 x SL151	1 x MG151	3 x	137'-9½" 42.00m	95'-7¾" 29.15m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	—	Reconnaissance Bomber
290 A-9	801D/G	1,700 ~~1,600~~	C3	6	—	1 x HD151	—	—	—	1 x MG151J	—	—	1 x MG151J	—	137'-9½" 42.00m	93'-11½" 28.60m	22'-4¾" 6.83m	2,191.53 sq. ft 203.6m²	—	Long-Range Bomber Long-Range
290 B-1	801E	2,000	C3	8	1 x HL131V	1 x HD151Z	1 x HD151Z			1 x FDL-C 151Z	—	—	1 x HL131V	—	137'-9½" 42.00m	95'-6½" 28.65m	22'-4¾" 6.83m	2,191.53 sq. ft 203.6m²	—	Transport High Altitude Reconnaissance
290 B-2	801E	2,000	C3	12	1 x HL131V	1 x HD151Z	1 x HD151Z	1 x HD151	1 x HD151	1 x FDL-C 151Z	—	2 x MG151Z	1 x MG151Z	4 x	137'-9½" 42.00m	96'-1½" 29.30m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	—	Reconnaissance Bomber
290 B MS	801E	2,000	C3	6	1 x HL131V	—	—	—	—	—	—	—	1 x MG151Z	—	137'-9½" 42.00m	96'-1½" 29.30m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	—	Mine Sweeper Proj.
290 C-1	222A	2,500	B4	8	1 x FDL151V	1 x HD151Z	1 x HD151Z	—	—	1 x FDL-C 151Z	—	—	1 x HL131V	—	137'-9½" 42.00m	95'-6½" 29.10m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	22,040 lb. 10,000 kg.	Long-Range Bomber Proj.
290 C-2	222A	2,500	B4	7	1 x FDL151V	1 x HD151Z	—	—	—	1 x FDL-C 151Z	—	—	1 x HL131V	—	137'-9½" 42.00m	95'-6½" 29.10m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	—	Long-Range Transport Proj.
290 D	222A	2,500	B4	9	1 x FDL151V	1 x HD151Z	1 x HD151Z	—	—	1 x FDL-C 151Z	—	—	1 x HL131V	2 x	137'-9½" 42.00m	95'-6½" 29.10m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	22,040 lb. 10,000 kg.	Long-Range Bomber Proj.
290 E	801TJ	1,715	C3	6	1 x FDL151V	1 x HD151Z	—	—	—	—	—	—	1 x FDL151V	—	137'-9½" 42.00m	95'-6½" 29.10m	22'-4¾" 6.83m	2,191.53 sq. ft. 203.6m²	40,55[illegible] lb. 18,248 kg.	Night Bomber Proj.

FOOTNOTE 1: A = A Stand (Nose)
B1 = B1 Stand (Forward Dorsal)
B2 = B2 Stand (Aft Dorsal)
B3 = B3 Stand (2nd Forward Dorsal)
B4 = B4 Stand (2nd Aft Dorsal)
C1 = C1 Stand (Forward Ventral)
C2 = C2 Stand (Aft Ventral)
S = Seitenständе (Side)
H = H Stand (Heck-Tail)
MG = Maschinengewehr (Machine gun)
HD = Hydraulische Drehringlafette (Hydraulically operated swivel mounting)
HDL or HL = Alternate designations for HD installations
Z = Zwilling (Twin)
FDL = Ferngerichtete Drehringlafette (Remotely controlled swivel mounting)

FOOTNOTE 2: ETC = Elektrische Trägervorrichtung für Cylinder bomben (Electrically operated carriers for cylindrical bombs)
The Henschel Hs 293, Hs 294 or Ruhrstahl-Kramer X-1 (FX) missiles could be carried by the Ju 290 ETC racks

WEIGHTS AND PERFORMANCE STATISTICS FOR THE Ju 290 A-5, A-7, A-8 and B-2

(metric figures in parentheses)		Ju 290 A-5	Ju 290 A-7					Ju 290 A-8					Ju 290 B-2				
		—	—	2 x Hs 293	1 x Hs 294	3 x Hs293	2 x Fx	—	2 x Hs293	1 x Hs294	3 x Hs293	2 x FX	—	2 x Hs 293	4 x Hs 293	2 x Hs 293 1 x Hs 294	2 x FX
• Equipped Weight	lb	52,896	54,615	54,615	54,615	54,615	54,615	58,781	59,100	58,946	59,266	59,100	65,360	65,679	65,999	65,845	65,679
	kg	(24,000)	(24,780)	(24,780)	(24,780)	(24,780)	(24,780)	(26,670)	(26,815)	(26,745)	(26,890)	(26,815)	(29,655)	(29,800)	(29,945)	(29,875)	(29,800)
• Crew Weight	lb	1,763	1,763	1,763	1,763	1,763	1,763	2,865	2,865	2,865	2,865	2,865	2,645	2,645	2,645	2,645	2,645
	kg	(800)	(800)	(800)	(800)	(800)	(800)	(1300)	(1300)	(1300)	(1300)	(1300)	(1,200)	(1,200)	(1,200)	(1,200)	(1,200)
• Fuel	lb	31,341	37,182	34,140	33,578	32,123	31,902	33,942	29,512	29,093	27,341	27,286	35,066	30,724	26,393	25,974	25,566
	kg	(14,220)	(16,870)	(15,490)	(15,235)	(14,575)	(14,475)	(15,400)	(13,390)	(13,200)	(12,405)	(12,380)	(15,910)	(13,940)	(11,975)	(11,785)	(11,600)
• Lubricants	lb	1,741	2,050	1,873	1,840	1,763	1,752	1,373	1,631	1,609	1,510	1,499	1,929	1,697	1,455	1,433	1,411
	kg	(790)	(930)	(850)	(835)	(800)	(795)	(850)	(740)	(730)	(685)	(680)	(375)	(770)	(660)	(650)	(640)
• Ammunition	lb	2,458	2,270	2,270	2,270	2,270	2,270	3,537	3,537	3,537	3,537	3,537	6,039	6,039	6,039	6,039	6,039
	kg	(1,115)	(1,030)	(1,030)	(1,030)	(1,030)	(1,030)	(1,605)	(1,605)	(1,605)	(1,605)	(1,605)	(2,740)	(2,740)	(2,740)	(2,740)	(2,740)
• Rubber Dinghy	lb	265	265	265	265	265	265	485	485	485	485	485	485	485	485	485	485
	kg	(120)	(120)	(120)	(120)	(120)	(120)	(220)	(220)	(220)	(220)	(220)	(220)	(220)	(220)	(220)	(220)
• Bombs	lb	—	—	4,254	4,849	6,381	6,612	—	4,254	4,849	6,381	6612	—	4,254	8,507	9,103	9,698
	kg	—	—	(1,930)	(2,200)	(2,895)	(3,000)	—	(19,30	(2,200)	(2,895)	(3000)	—	(1930)	(3860)	(4130)	(4400)
• TAKEOFF WEIGHT	lb	90,463	98,144	99,180	99,180	99,180	99,180	101,483	101,138	101,138	101,138	101,138	111,522	111,522	111,522	111,522	111,522
	kg	(41,045)	(44,530)	(45,000)	(45,000)	(45,000)	(45,000)	(46,045)	(46,000)	(46,000)	(46,000)	(46,000)	(50,600)	(50,600)	(50,600)	(50,600)	(50,600)
• Max. sp. at 6,336 ft (2 km) (0 km for A-8, B-2)		254 (409)	250 (403)	250 (402)	251 (404)	250 (401)	250 (403)	227 (366)	225 (363)	226 (364)	225 (362)	225 (363)	228 (368)	228 (368)	228 (367)	229 (369)	229 (369)
• Max. sp. at 15,840 ft (5 km) (6.2 km/19,642' for B-2)		282 (455)	278 (448)	277 (447)	278 (449)	277 (446)	278 (448)	265 (426)	260 (420)	261 (421)	259 (417)	260 (419)	269 (433)	*269 (433)	269 (434)	270 (435)	272 (438)
• Range at 6,336 ft (2 km) (at max. speed)		2,604 mi (4,340 km)	3,072 mi (5,120 km)	2,760 mi (4,600 km)	2,730 mi (4,550 km)	2,580 mi (4,300 km)	2,568 mi (4,280 km)	2,556 mi (4,260 km)	2,208 mi (3,680 km)	2,184 mi (3,640 km)	1,980 mi (3,300 km)	2,000 mi (3,330 km)	2,328 mi (3,880 km)	2,000 mi (3,330 km)	1,668 mi (2,780 km)	1,662 mi (2,770 km)	1,638 mi (2,730 km)
• To target mph(km/h)		244 (394)	241 (388)	233 (376)	235 (379)	229 (370)*	231 (372)	234 (377)	223 (359)	225 (362)	219 (353)	220 (355)	236 (381)	224 (362)	215 (346)	218 (352)	220 (355)
• From target		251 (405)	249 (401)	247 (399)	248 (400)	247 (398)	247 (399)	234 (377)	236 (380)	235 (379)	233 (376)	228 (368)	236 (381)	239 (386)	238 (384)	238 (383)	240 (387)
• Range at 6,336 ft (2 km) (at cruise speed)		3,996 mi (6,660 km)	4,524 m (7,540 km)	4,002 mi (6,670 km)	3,972 mi (6,620 km)	3,696 mi (6,160 km)	3,672 mi (6,120 km)	3,660 mi (6,100 km)	2,898 mi (4,830 km)	2,892 mi (4,820 km)	2,568 mi (4,280 km)	2,610 mi (4,350 km)	3,620 mi (5,840 km)	2,928 mi (4,880 km)	2,388 mi (3,980 km)	2,358 mi (3,930 km)	2,382 mi (3,970 km)
• To target mph(km/h)		191 (308)	195 (315)	198 (320)	198 (319)	198 (320)	198 (320)	191 (308)	201 (324)	200 (323)	201 (324)	201 (324)	200 (323)	210 (339)	211 (340)	211 (340)	211 (341)
• From target		190 (306)	189 (304)	187 (302)	188 (303)	187 (302)	187 (302)	191 (308)	178 (289)	186 (300)	187 (302)	187 (302)	200 (323)	190 (307)	188 (304)	188 (304)	188 (303)
• Climb to 6,336 ft (2 km)		8.5 min	11.0 min	12.0 min	11.5 min	12.5 min	12.0 min	13 min	14 min	13.8 min	14.6 min	14.2 min	12.1 min	12.7 min	13.5 min	13.4 min	13.1 min
• Max. Service Altitude ft (m)		29,205 (8850)	27,390 (8300)	27,885 (8450)	27,885 (8450)	28,050 (8500)	28,050 (8500)	25,080 (7600)	24,255 (7350)	24,354 (7380)	23,859 (7230)	23,925 (7250)	24,915 (7550)	25,410 (7700)	25,470 (7800)	26,070 (7900)	26,235 (7950)
• TAKEOFF DISTANCE ft (m)		3,201 (970)	3,993 (1210)	4,092 (1240)	4,092 (1240)	4,092 (1240)	4,092 (1240)	4,488 (1360)	4,340 (1315)	4,340 (1315)	4,340 (1315)	4,340 (1315)	4,537 (1375)	4,537 (1375)	4,537 (1375)	4,537 (1375)	4,537 (1375)



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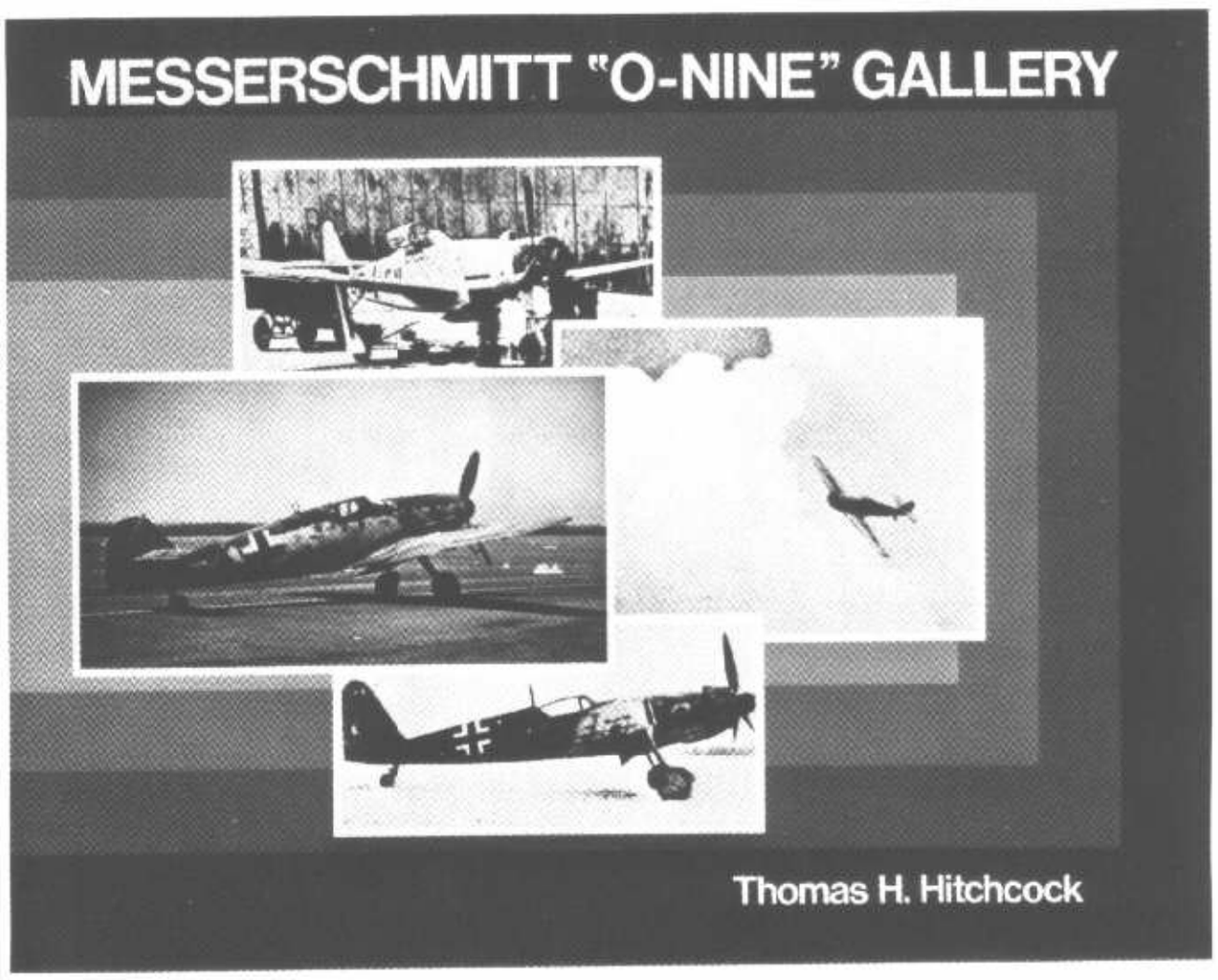

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